

NATIONAL OFFSHORE SAFETY ADVISORY COMMITTEE

RESTORATION AND RECOVERY ACTIVITIES TASK STATEMENT SUBCOMMITTEE

REPORT AND RECOMMENDATIONS

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EXECUTIVE SUMMARY

During the 2017 hurricane season, multiple significant storms hit the North American region requiring a substantial response from the U.S. maritime industry, including the offshore energy sector. A number of U.S. flagged vessels that were capable of performing necessary, critical functions came to the aid and support of affected U.S. citizens and interests. Other vessels, however, were blocked by strict and sometimes conflicting interpretations of U.S. Coast Guard regulations. In response to these circumstances it became apparent that further action is warranted to resolve disparities between known U.S. fleet capabilities and the varying interpretation and enforcement of existing regulations. Likewise, efforts are needed to raise the level of understanding of fleet capabilities and of the requirements of the U.S. government entities requiring its services.

This document represents the Final Report of the Restoration & Recovery Activity Subcommittee addressing the questions and requests laid out in the official Task Statement, “Use of Offshore Supply Vessels (OSVs) and other vessels in restoration and recovery efforts” as assigned to the National Offshore Safety Advisory Committee (NOSAC) on 11 September 2018.

It is the intent of this document to begin the process of addressing these issues and, more importantly, to lay the foundation for a cooperative relationship between the industry, the U.S. Coast Guard and other U.S. government agencies, and the U.S. citizens and national interests which they all must serve during times of declared disaster.

The Subcommittee respectfully requests that the National Offshore Safety Advisory Committee accept this report as representing completion of the assigned Task Statement entitled, “Use of Offshore Supply Vessels (OSVs) and other vessels in restoration and recovery efforts” and vote to submit this report for immediate action on the part of the USCG.

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RESPONSE & RECOVERY ACTIVITY TASK STATEMENT DESCRIPTION AND OVERVIEW

Background

The National Offshore Safety Advisory Committee (NOSAC) Response & Recovery Activities Subcommittee was stood up during the proceedings of the public 2018 Fall Committee meeting held in Houston, Texas. At that time the final Task Statement was provided and a timeline laid out calling for completion of the assigned scope by the 2019 Spring Meeting.

Over the course of Subcommittee deliberations, it became apparent that the scope of the Task Statement was deserving of a level of effort and consideration that exceeded the time allotted. It was determined that additional time would be necessary to allow the Subcommittee membership and the greater offshore industry an appropriate opportunity to review and respond, commensurate with the importance of the Task Statement and its potential impact on the industry.

The Subcommittee provided an Interim Report on the assigned Task Statement at the time of the Spring 2019 Committee meeting which outlined several actionable items to be implemented by the USCG prior to the start of the 2019 hurricane season. In addition, at that time, the Subcommittee requested and received approval to continue its discussions with the goal of completing all Task Statement deliverables before the Fall 2019 NOSAC meeting.

Planning and Deliberation

To facilitate completion of the Final Report by the initial March 2019 and subsequent September 2019 deadlines Subcommittee meetings were conducted via teleconference on a bi-weekly schedule as established at the commencement of Subcommittee activities in October 2018. In person meetings were conducted in January, March, and September 2019.

Co-Chairs and Subcommittee membership concentrated their efforts on delivering recommendations and responses addressing the Task Statement questions and the related items for consideration that were raised during the same process. Topics addressed included, but were not limited to:

- Vessel capabilities required during time of declared disaster
- Fleet logistics when responding to declared disasters
- Defining requirements of the USCG, MARAD, FEMA and other federal agencies
- Familiarizing federal agencies on vessel and fleet capabilities
- Regulatory and administrative obstacles to response and recovery activities

The concentration on individual topics afforded more intensive exploration of federal requirements and industry capabilities. The Subcommittee was thus able to focus on the challenges that have historically impeded the clear determination of response organizations' needs and the efficient application of the industry's available resources.

The suggestions, recommendations, and comments of Subcommittee membership and teleconference participants were compiled by the Co-Chairs and discussed among the whole Subcommittee membership. Unless otherwise specified, this report carries the consensus opinion of the Subcommittee Membership on all recommendations.

Conduct of Work

11 Sept 2018	Response & Recovery Activities Subcommittee stood up by NOSAC
03 Oct 2018 – 06 Feb 2019	Subcommittee discussions (approximately bi-weekly)
09 Jan 2019	In person meeting, MSRC facilities, Houston, TX
20 Feb 2019	Preliminary Report for Subcommittee review / comment
21 Feb – 01 Mar 2019	Co-Chairs Draft Interim Report; submitted to Subcommittee for final review
01 Mar 2019	Subcommittee Report submitted to NOSAC
01 – 20 Mar 2019	Final revisions made based on Committee feedback
20 Mar 2019	Presentation of Interim Report
10 Apr – 28 Aug 2019	Subcommittee discussions (approximately bi-weekly)
01 Sept 2019	Final Report Submitted to NOSAC
11 Sept 2019	Final Report Submitted to USCG

NOTE: Additional discussions occurred outside of scheduled Subcommittee meetings with all topics presented for consideration during official Subcommittee teleconferences.

NATIONAL RESPONSE, RESTORATION, AND RECOVERY

Overview

During the 2017 hurricane season, multiple significant storms impacted North America requiring a substantial response from the U.S. maritime industry, including the offshore energy sector. A perception arose that insufficient U.S. flag assets were available to respond to the resulting humanitarian crises including for the transport of relief supplies and critically needed commodities within and between the U.S. and its territories. Public misconceptions fed by a general lack of understanding and combined with a demand for action on the part of the Administration resulted in the issuance of multiple waivers of Jones Act requirements. Consequently, a total of ten (10) foreign vessels were allowed to provide Puerto Rico with fuel, generators, water, and other supplies which could have been provided on a shorter timescale by available OSVs. Though these waivers were limited in duration, they allowed for foreign flag vessels to gain access to a national market with a continued negative impact on the perception of the U.S. fleet capabilities.

Case for Action

U.S. flag vessels were immediately available and attempted to respond in support of the nation's citizens and interests. Though capable of performing the necessary tasks, some vessels were not engaged due to a lack of response agencies' knowledge of a vessel's legal operating requirements. Others were blocked by strict and sometimes conflicting interpretations of regulations. Vessel owners/operators were required to expend resources seeking multiple waivers in continued efforts to respond to these crises. Approximately 75 percent of these waivers were ultimately denied on the same grounds for which they were requested, effectively crippling a critical aspect of the Nation's disaster response capability.

Additionally, during the response activities surrounding these crises, it became apparent to the offshore industry that government entities including the Federal Emergency Management Agency (FEMA) and the Maritime Administration (MARAD) may not be fully aware of the capabilities of both multi-certificated and non-multi-certificated OSVs and other assets or the availability of these resources for response, restoration, and recovery activities.

Agencies responsible for disaster response remain uninformed of the extent of these resources and capabilities and have failed to successfully engage the industry in dialogue aimed at creating a better understanding. Meanwhile, the offshore industry continues to evolve, developing more wide-ranging skills and technologies but shares fault in neglecting to effectively bridge the gap between reality versus the perception of the immediate and potential capabilities of the extensive resources within the sector.

Federal agencies require the industry's support during times of disaster and the industry desires the opportunity to respond to such emergencies, not just for commercial gain but also as a result of its demonstrated and characteristic sense of obligation to the nation's citizenry and interests. It is important to all concerned that efficient and effective processes are established that will facilitate an equally efficient and effective response.

Summary

Though prompted by circumstances related to hurricane response activities, U.S. flag resources are capable of multiple functions related to response, restoration, and recovery activities stemming from diverse disaster scenarios. However, these capabilities are not well understood or publicized. It is the intent of this document to begin the process of resolving this disparity and, more importantly, to lay the foundation for a cooperative relationship between the industry, the U.S. Coast Guard and other U.S. government agencies, and the U.S. citizens and national interests which they all must serve during times of officially declared disaster.

TASK STATEMENT QUESTION 1

Question 1 (Main Text):

Provide recommendations in the form of responses to the following questions. Please solicit and obtain information from within the industry.

Question 1a:

The D8 policy creates an avenue for a purpose-built vessel to be capable of engaging in different services. What areas (design, operations, etc.) on board a vessel are an impediment to achieving multi-service certification?

Response

The Subcommittee recognizes that each Multi-Service certificated OSV is capable of different tasks and operations both as a result of design as well as by innate ability to carry out general functions within the maritime environment. These capabilities differ between assets and vary greatly depending on Class Society notation, flag state certification, and design intent (i.e. industrial mission). Consequently, the capabilities of these assets to perform certain tasks and missions are difficult to capture succinctly.

It is the consensus of the Subcommittee that the D8(m) Policy Letter 09-2001 – Certification of Multi-Service Offshore Supply Vessels (OSVs) and its related materials (with updates) satisfactorily describe the general design constraints, mission restrictions, and/or capability limitations that may be considered reasonable impediments to achieving Multi-Service certification for vessels falling under the general category of OSV. It is the view of the Subcommittee that this same District 8 Policy Letter adequately outlines the mitigations of these impediments through the application of reasonable standards for inspection, evaluation, and endorsement of multi-service vessels.

It is likewise the opinion of the Subcommittee that the Policy Letter and its enclosures, most importantly, effectively outline a consistent, district-wide application of certification requirements and represent the practical interpretation/application of relevant U.S. and international standards.

Recommendation(s)

1. The Subcommittee recommends the adoption of a national policy based on the D8 Policy Letter 09-2001 as revised and noted in its entirety within Appendix A – Proposed Policy Letter – Certification of Multi-Service Offshore Supply Vessels (OSV) (Revised D8 Policy Letter). The implementation of the guidelines within this revised Policy Letter beyond the District 8/Gulf of Mexico region will provide the basis for consistent interpretation and application of standards for multi-service certification across the industry. The adoption of a uniform approach to such certifications will facilitate safe, efficient, and effective operations as OSVs expand in use beyond the Gulf of Mexico into developing industrial sectors and operational areas around the U.S., its non-contiguous states, and its territories.

Reference(s)

- D8(m) Policy Letter 09-2001 – Certification of Multi-Service Offshore Supply Vessels (OSVs)
- Appendix A – Proposed Policy Letter – Certification of Multi-Service Offshore Supply Vessels (OSV) (Revised D8 Policy Letter)
- D8(m) Policy Letter (25 Nov 1999) – Certification of Multi-Service Vessels
- RRATS 20190320 Interim Report

Question 1b:

In the event of a natural or manmade disaster, which options or equivalent levels of safety may be established for those items in paragraph (a) to enable a vessel to engage in potential relief operations?

General Response

The Subcommittee considers the topic of response, restoration, and recovery tasks to be a subcategory of activities falling under the broader multi-service certification discussion. For this reason, the Subcommittee has chosen to address Question 1(b) with a particular focus on the potential requirements related specifically to response, restoration, and recovery operations. Other multi-service certification requirements are addressed under the revised District 8 policy letter (reference Question 1(a)).

Restrictions or impediments to response related activities are only partially attributable to any limitations of the vessels themselves. The use of both multi-certificated and non-multi-certificated OSVs for response, restoration, and recovery activities is many times restricted based on interpretations of U.S. regulations (i.e. CFRs) and international law (i.e. SOLAS). Such interpretations impede the use of available and capable assets that may otherwise be employed for such operations particularly in matters that could negatively impact U.S. citizens and interests.

Within the scope of this Task Statement, the Subcommittee broadly considered three categories representing possible impediments – *Design, Operations, and Personnel*. As noted, these impediments, though potentially related to multi-service certification, are specifically discussed with regard to response, restoration and recovery activities.

Design Considerations

Vessels are designed with the intent of accomplishing specific industrial missions. While a given design may be capable of a multitude of both designed and innate capabilities, each vessel cannot be guaranteed to be capable of the specific requirements of a given disaster scenario. Disaster response activities may require general facilities such as external fire-fighting equipment (i.e. monitors) or more specific needs such as heavy lift capabilities.

In addition, every vessel is generally capable of berthing marine crew and providing for their basic necessities. However, these facilities may be limited in capacity or in range of services that may impact the ability to respond to the specific needs of response personnel or displaced citizens. Such limitations may include sufficient berthing or substantial medical facilities.

Design Recommendation(s)

1. As indicated in response to Question 1(a), above, the Subcommittee recommends that the D8 Policy Letter 09-2001 be adopted as a national policy with revisions noted within Appendix A – Proposed Policy Letter – Certification of Multi-Service Offshore Supply Vessels (OSV). Insofar as response, restoration, and recovery capabilities are addressed within the standards applied to multi-certificated OSVs, the adoption of these standards and guidelines will serve to ease impediments to disaster related response activities.
2. With regard to the berthing of response personnel, the Subcommittee recommends the national adoption of the D8 Policy Letter 01-2017 with revisions contained in Appendix B – Temporary Emergency Berthing Vessels. Such a national policy would provide for the temporary berthing of response personnel regardless of the location of any declared disaster and will allow for responsible, qualified personnel to be located within a reasonable distance to a disaster location.

3. Further to the above recommendation, it is noted that the D8 Policy Letter only covers the berthing of response personnel and does not address their transport to/from disaster locations. The Subcommittee recommends the adoption of the Proposed Policy Letter – Temporary Personnel Transport Vessels as part of the capability assessment process for appropriately equipped vessels pursuing the Response, Restoration, and Recovery Vessel (TRV) endorsement. See Appendix E and response to Question 1(c), below.
4. In light of the difficulty in categorizing capabilities and impediments, the Subcommittee recommends that the U.S. Coast Guard and other concerned federal agencies, in cooperation with industry stakeholders, adopt a matrix style approach to vetting appropriate resources as outlined within the response to Question 1(c), below.

Design Reference(s)

- D8(m) Policy Letter 09-2001 – Certification of Multi-Service Offshore Supply Vessels (OSVs)
- D8(m) Policy Letter (25 Nov 1999) – Certification of Multi-Service Vessels
- D8(dp) Policy Ltr 01-2017 – Temporary Emergency Berthing Vessels
- Appendix A – Proposed Policy Letter – Certification of Multi-Service Offshore Supply Vessels (OSV) (Revised D8 Policy Letter)
- Appendix B – Proposed Policy Letter – Temporary Emergency Berthing Vessels (Revised D8(dp) Policy Letter)
- Maritime Emergency Response Guide, U.S. Department of Transportation
- RRATS 20190320 Interim Report

Operational Considerations

Vessels may carry supplies that are adequate only for a particular industrial project of limited duration. Although existing capabilities and capacities of a vessel may well allow for operations over a much longer period, ongoing operations may restrict the supplies available for a response operation of considerable duration. As an example, food, potable water, and fuel may not be held at full capacity and medical supplies may be limited.

In addition, specialized commercial operations undertaken by a vessel at a given time may restrict the type of equipment carried on board to that which is required for the industrial mission. As a result, depending on the type of disaster situation a vessel may not carry the specific response equipment required such as specialized fire-fighting equipment and oil spill response equipment beyond what is normally carried on board.

Depending on the incident, vessels respond with whatever capabilities they have on board at the time of the disaster. An oil spill, blowout, fire, etc. requires immediate localized responses. National responses initiated by federal agencies such as FEMA, MARAD and USCG would provide opportunities to vessel owners/operators to clear decks where needed and load any supplies and/or specialized equipment, personnel, etc. which would be required for an extended period of assistance.

Operational Reference(s)

- Appendix E – Proposed Policy Letter – Response, Restoration, and Recovery Vessels (TRV)
- Appendix G – Sample Vessel, Activity, and Capability matrices

Personnel Considerations

As a result of the specific requirements outlined within the U.S. Code of Federal Regulations (CFR) and various related Subchapters, licensed marine personnel may be restricted to working on vessels located only in specific regions and waters. Depending on location of disaster (such as Puerto Rico and/or U.S. Virgin Islands) personnel may not hold the adequate licenses appropriate for an international voyage as defined within the U.S. Code of Federal Regulations.

In addition, the normal operating complement of marine personnel may not carry the specialized training and qualifications for certain disaster response activities such as for the provision of medical aid beyond basic lifesaving and first aid.

Personnel Recommendation(s)

1. It is the Subcommittee's recommendation that manning levels aboard affected vessels remain consistent between designed industrial mission and response, restoration, and recovery activities citing the historic and continued precedent of both multi-certificated and non-multi-certificated OSVs safely maintaining a two-watch system. If it is deemed necessary by the appropriate OCMI, an increase in manning shall be approached with the understanding that the vessel will be manned with mariners carrying the appropriate credentials, having operational experience on the same or similar vessels, and within the guidelines provided in CG-MMC Policy Letter 02-17 (Ch-1), Section 6 (a)(b)(c) and (d).
2. The Subcommittee recommends that the USCG adopt the District 8 Policy Letter 01-2017 – Temporary Emergency Berthing Vessels as a national policy. Such a national policy would provide for the temporary berthing of response personnel (certified or otherwise qualified to carry out specialized tasks related to response, restoration, and recovery activities) within a reasonable distance of a disaster location.
3. The Subcommittee recommends that the USCG align the CFR definition of "International Voyage" with Regulation 2(d) of part A, chapter I in the International Convention for Safety of Life at Sea, 1974. (SOLAS 74). See response to Question 2, below.

Personnel Reference(s)

- D8(dp) Policy Ltr 01-2017 – Temporary Emergency Berthing Vessels
- Appendix B – Proposed Policy Letter – Temporary Emergency Berthing Vessels (Revised D8(dp) Policy Letter)
- CG-MMC Policy Letter 02-17 (Ch-1) – Credentialing of Seafarers Working on Hurricane Relief Vessels
- Appendix C – Proposed Policy Letter – Disaster Response Credentialing
- RRATS 20190320 Interim Report

Question 1c:

Numerous vessel operators have made investments into obtaining multi-service certification. Under what conditions should the Coast Guard consider temporary alternatives or equivalent levels of safety to allow vessels that do not have the appropriate multi-service certification to operate?

Response

It is the consensus of the Subcommittee that the D8(m) Policy Letter 09-2001 – Certification of Multi-Service Offshore Supply Vessels (OSVs) and its related materials adequately outline the appropriate design, mission, and capability standards for the Multi-Service certification of vessels and assets falling under the category of OSV. These guidelines provide reasonable criteria for the inspection, evaluation, and endorsement of multi-service vessels and effectively define a consistent application of certification requirements and the practical interpretation of relevant U.S. and international standards.

The implementation of the guidelines within the revised Policy Letter establishes the basis for the continued safe and effective operation of qualified and capable marine assets and minimizes the need to consider vessels of opportunity that may not have undergone similar, stringent vetting processes. Therefore, it is the Subcommittee’s opinion that the priority for right-of-first-refusal be offered first to OSVs carrying the Multi-Service certification followed by those carrying the Response, Restoration, and Recovery Vessel (TRV) endorsement. Finally, vessels of opportunity may be approached to accomplish disaster-related activities assuming comparable risk and capability assessments have been performed and approval granted by the cognizant OCMI.

Capability Assessment and Matrix

For both Multi-Service certificated and TRV endorsed vessels, risk assessments are inherent in day-to-day activities and in regular internal and external valuations. Such assessments form a part of a company’s internal requirements established by programs including Safety Management Systems (SMS). These risk assessment protocols undergo further checks and verifications through external regimes including Safety and Environmental Management Systems (SEMS) and independent criteria established by industry organizations including Class Societies and various regional and international standardization bodies.

For assets certified as Multi-Service OSVs or as TRVs, therefore, assessment and preapproval processes will already incorporate thorough risk analyses. Any assessment for disaster related activities should therefore focus on a realistic assessment of vessel capabilities to perform those activities.

Using a matrix approach to such assessments (as illustrated in Appendix G), government entities shall discuss the projected requirements for reasonably anticipated disasters or emergencies and determine the capabilities that will be required of any vessels called on to respond. The required capabilities of such vessels shall be explicitly outlined and provided to industry for the purposes of registering vessels appropriately. Industry stakeholders, in turn, shall be prepared to provide a realistic assessment of vessel capabilities and necessary assurance of risk avoidance (as noted above). Once requirements are clearly defined industry stakeholders and government agencies can work together to generate an active list of available assets based on capabilities, location, availability, etc.

This matrix style approach to vessel selection and approval shall therefore incorporate a goal-based regimen rather than a prescriptive process that is based on the vessel’s physical capabilities and ability to safely accomplish possible disaster response, restoration, and recovery

activities. Such response related activities may or may not be outlined within a vessel’s specific inspection subchapter(s) or noted on its COI.

The adoption of the matrix style approach to vessel selection based on an asset’s physical capabilities will allow for individual assets to be assessed and approved for various activities related to response, restoration, and recovery activities. Based on a thorough analysis of proposed activities, the matrix approach will allow government agencies and industry stakeholders to create an active listing of vessels that are available and capable of executing necessary tasks in response to a disaster safely, effectively, and immediately.

TRV Endorsement

The TRV endorsement will be allocated to vessels based on an assessment of existing capabilities and anticipated activities and will be applicable only during times of an officially declared disaster. During such times, the TRV endorsement will supersede other operating restrictions but will only be applicable for a limited duration and within the region(s) affected by the disaster or directly involved in the response operation and activities.

The endorsement type and duration are defined in general accordance with the U.S. Department of Homeland Security’s “Recovery Continuum” as provided in the second edition of the National Disaster Recovery Framework, published in June of 2016, and illustrated as follows:

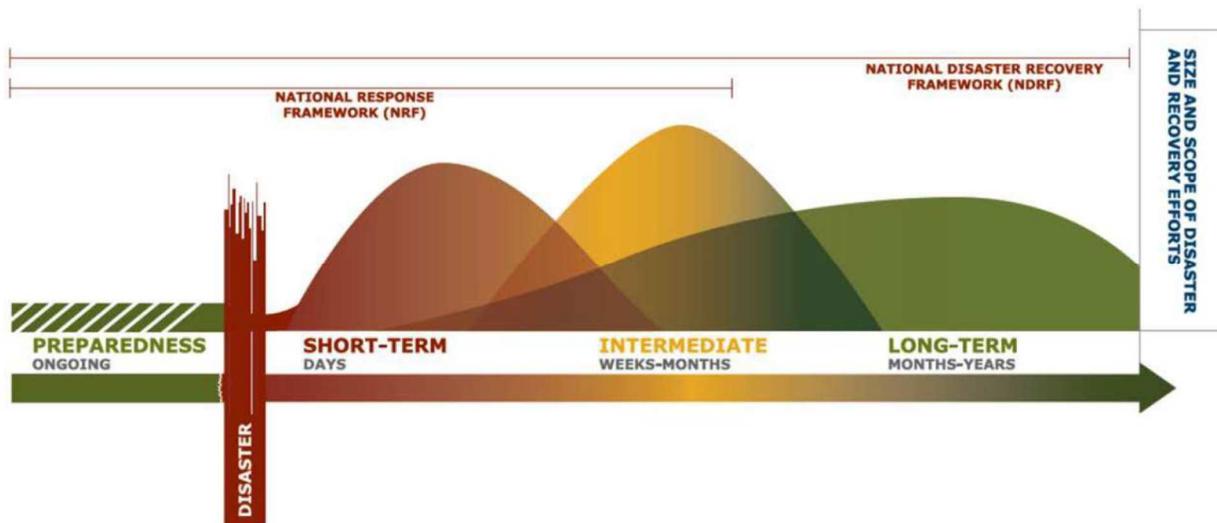


Figure 1: "Recovery Continuum", DHS, 2016.

Each TRV may be operated per its designated qualified level of operation for response, restoration, and recovery efforts during and after designated state and federal disasters or at any time its capabilities are deemed necessary for the support of such activities by applicable state or federal agencies. Activities, TRV designation, and duration may be generally defined as follows:

- Response (Short-Term) – TRV 1 – Actions related to the immediately critical reaction to any natural or manmade disaster including activities involving lifesaving, or environmental, structural, or infrastructure damage mitigation. (Suggested applicability period – 0-7 days.)
- Restoration (Intermediate) – TRV 2 – Activities pertaining to the reestablishment of services critical to basic humanitarian, infrastructure, and operational needs in the immediate aftermath of a disaster. (Suggested applicability period – 1-4 weeks.)
- Recovery (Long-Term) – TRV 3 – Sustained activities related to supporting the long-term needs of an affected region or group. (Suggested applicability period – 1-6 months.)

Each category of activity and related time commitment increases the level of risk associated with the activity. Each asset carrying an existing designation as TRV 3 or TRV 2 may be deemed qualified for activities of any lower designation. However, TRV 1 or TRV 2 may be upgraded to any higher designations only following reassessment.

The TRV endorsement will not take precedence over existing Multi-Service certification. Those vessels carrying Multi-Service certification will carry the right of first refusal during response, restoration, and recovery activities. Vessels assessed and approved for TRV endorsement (without Multi-Service certification) will take subsequent priority. Only after it is established that multi-certificated OSVs and TRV notated vessels are not available shall consideration be given to vessels of opportunity that meet the appropriate standards as laid out within applicable CFRs, NVICs, and Policy Letters.

Standby Vessels

OSVs that qualify as Standby Vessels, as defined within 33 CFR, Subchapter N, Subpart E, are automatically qualified to receive an appropriate TRV endorsement commensurate with the vessel's size, range, and capabilities.

Small Crewboats and Passenger Vessels

Small passenger vessels, crewboats, and other, non-multi-certificated OSVs can also play critical roles in response, restoration, and recovery activities. The services and capabilities that these assets make available should be likewise addressed. These assets are referenced within the USCG Auth Act Section 838, EMERGENCY RESPONSE. §21, which states:

Not later than 90 days after the date of enactment of this Act, the Commandant of the Coast Guard shall request the National Offshore Safety Advisory Committee to examine whether there are unnecessary regulatory barriers to the use of small passenger vessels, crewboats, and offshore supply vessels in disaster response and provide recommendations, as appropriate, to reduce such barriers.

When implemented, the TRV endorsement process will likewise take into account and consideration the capabilities of these smaller vessels. Those vessels, having passed applicable risk assessments will be further assessed based on their innate capabilities and will receive the appropriate endorsement as a TRV 1, 2, or 3, thereby removing unnecessary regulatory barriers that would otherwise prevent their uses as disaster response resources.

Application and Approval Processes

The TRV endorsement will not require the vessel owner / operator to incur any additional cost. Rather this endorsement will be assigned based on an assessment of additional, innate capabilities related to response, restoration, and recovery activities that the vessel is immediately capable of without significant change in design or industrial mission.

As described above, risk assessments are a structured and instrumental activity in the day-to-day operations of vessels in the offshore energy sector. As a result, no additional risk assessments will be necessary to pursue endorsement as a TRV outside of what is already applied to an asset as a result of its exiting COI, Class notation, or its confirmed ability to operate according to recognized industry standards.

Nevertheless, as part of the TRV capability assessment, the consistent application and verification of such risk assessments must provide adequate assurances of risk avoidance and safe operations, comparable to assets certificated for specific response, restoration, and recovery missions including, but not limited to:

- A vessel specific safety management system (SMS) that explicitly addresses disaster response operations. Where required by law – such as with vessels carrying Multi-Service certification – vessels must adhere to the standards set forth under the IMO International Safety Management (ISM) Code. If not required by law, such SMS policies and procedures shall be comparable to the standards set forth under the ISM Code but certification under those requirements is not mandatory.
- Vessels shall be equipped with robust and redundant equipment systems capable of executing assigned tasks within the parameters determined by a complete risk assessment. Such equipment/system capabilities may be verified by existing Class notations or confirmed by testing and verification in keeping with the vessel's industrial mission.

Specific response, restoration, and/or recovery activities that may be deemed to fall outside of the existing capabilities of an asset may require additional risk assessments at the discretion of the cognizant OCMI. Any changes to design or installed equipment deemed necessary by the vessel owner / operator for the purposes of attaining additional response-related capabilities will be taken on at the owner's expense.

Recommendation(s)

1. The Subcommittee recommends that during times of officially declared disasters requiring the use of marine assets for response, restoration, and/or recovery activities, the priority for right-of-first-refusal be given to OSVs carrying the Multi-Service certification, followed by those carrying the TRV endorsement (as outlined above) over those vessels that have not been comparably risk assessed and approved. Only after it is established that multi-certificated and TRV notated vessels are not available shall consideration be given to vessels of opportunity that meet the appropriate standards as laid out within applicable CFRs, NVICs, and Policy Letters.
2. The Subcommittee recommends that during times of disaster the assessment and determination of fitness-for-purpose concerning available, multi-certificated and non-multi-certificated OSVs shall be made based on the standards outlined within the revised D8 Policy Letter 09-2001 and/or in the Proposed Policy Letter – Response, Restoration, and Recovery Vessels (TRV). Such determinations of OSV fitness-for-purpose shall be considered valid across affected areas, districts, and/or sectors.
3. The Subcommittee recommends that the USCG and other concerned government agencies, with the full cooperation of industry stakeholders (particularly vessel owners / operators), adopt a matrix style approach to vessel selection and approval, based on an asset's legal qualifications, physical capability, and ability to safely accomplish potential response, restoration, and recovery activities.

Reference(s)

- D8(m) Policy Letter 09-2001 – Certification of Multi-Service Offshore Supply Vessels (OSVs)
- D8(m) Policy Letter (25 Nov 1999) – Certification of Multi-Service Vessels
- Appendix A – Proposed Policy Letter – Certification of Multi-Service Offshore Supply Vessels (OSV) (Revised D8 Policy Letter)
- Appendix E – Proposed Policy Letter – Response, Restoration, and Recovery Vessels (TRV)
- Appendix G – Sample Vessel, Activity, and Capability matrices
- Department of Homeland Security (2016, Jun). National Response Framework, Third Edition.
- RRATS 20190320 Interim Report

TASK STATEMENT QUESTION 2

Question 2:

Provide any additional recommendations that the Subcommittee believes are relevant to this tasking.

General Response

During the response activities surrounding the weather-related events and subsequent crises of 2017, it became apparent to the offshore industry that responsible government entities including, but not limited to, the Federal Emergency Management Agency (FEMA) and the Maritime Administration (MARAD) may not be fully aware of the capabilities of both multi-certificated and non-multi-certificated OSVs and other maritime assets or the availability of these vessels for response, restoration, and recovery activities.

In the reaction to these circumstances it became apparent that efforts are needed to raise government and public understanding of the industry's wide-ranging capabilities and the industry's understanding of requirements of the entities requiring its services. Likewise, further action is warranted to resolve disparities between qualified fleet capabilities and the varying interpretation of existing regulations.

Agencies responsible for disaster response remain uninformed of the extent of these resources and capabilities and have failed to successfully engage the industry in dialogue aimed at creating a better understanding. Meanwhile, the offshore industry continues to evolve, developing more wide-ranging skills and technologies but shares fault in neglecting to effectively bridge the gap between reality versus the perception of the immediate and potential capabilities of the extensive resources within the sector.

While the issues surrounding response activities are complex, a few key points warrant specific attention. Disaster situations are diverse and an effective response will require equally diverse resources. The response requirements of U.S. government entities have not been clearly presented to the industry. Finally, the capabilities of qualified fleet resources may not be clearly understood by the agencies responsible for organizing an effective response.

Recommendation(s)

1. The Subcommittee recommends that the USCG create and publish guidance for vessel owners and operators that provides explicit instructions outlining the means by which a vessel and/or company may become a pre-approved resource. In conjunction with this published guidance, the Subcommittee recommends that the USCG and other concerned federal agencies create a formal communication protocol by which needs and requirements during disasters are explicitly stated both internally (between agencies) and externally (to the industry).

Reference(s)

- Appendix E – Proposed Policy Letter – Response, Restoration, and Recovery Vessels (TRV)
- Appendix G – Sample Vessel, Activity, and Capability Matrices
- U.S. Committee on the Marine Transportation System Marine Transportation System – Resilience Integrated Action Team (RIAT). *The 2017 Hurricane Season: Recommendations for a Resilient Path Forward for the Marine Transportation System*
- RRATS 20190320 Interim Report

Regulatory Considerations

As noted earlier, impediments to response related activities are only partially attributable to the limitations of the vessels themselves. The use of both multi-certificated and non-multi-certificated OSVs for response, restoration, and recovery activities is many times restricted based on interpretations of U.S. regulations (i.e. CFRs) and international law (i.e. SOLAS). Such interpretations impede the use of available and capable assets that may otherwise be employed for such operations particularly in matters that could negatively impact U.S. citizens and interests.

Two specific issues relate to this discussion, the first of which is that the CFR expanded the definition of “international voyage” to the detriment of U.S. flag vessels only. Regulation 2(d) of part A, chapter I in the International Convention for Safety of Life at Sea, 1974. (SOLAS 74), defines an international voyage as follows:

International voyage means a voyage from a country to which the present Convention applies to a port outside such country, or conversely.

46 CFR, Chapter I, Subchapter D, Part 30, Subpart 30.01, Section 30.01-6 – “Application to vessels on an international voyage” recognizes the SOLAS definition (see Regulation 2(a)(2)(i)) but additionally defines “international voyage” to apply to any vessel that:

(2) Is engaged on a voyage: (ii) From any territory, including the Commonwealth of Puerto Rico, all possessions of the United States, and all lands held by the United States under a protectorate or mandate, whose international relations are the responsibility of a contracting SOLAS 74 government, or which is administered by the United Nations, to a port outside that territory or the reverse.

(NOTE: 46 CFR, Chapter I, Subchapter I, Part 90, Subpart 90.05, Section 90.05-10 has similar text.)

Although possible exemptions are noted in 2(c)(1) & (2):

(c) The Commandant or his authorized representative may exempt any vessel on an international voyage from the requirements of this subchapter if the vessel: (1) Makes a single international voyage in exceptional circumstances; and (2) Meets safety requirements prescribed for the voyage by the Commandant. (Emphasis added.)

This limited exemption, however, is not practical for an ongoing response operation.

The second issue surrounds the apparent double standard applied to OSVs which allow appropriately certificated OSVs to transfer fuel offshore to MODUs and other assets but generally prohibits the transfer of fuel near shore or to a shoreside facility while executing disaster response activities.

Regulatory Recommendation(s)

1. The Subcommittee recommends that the USCG align the CFR definitions of “International Voyage” in 46 CFR Subchapter I and Subchapter D with Regulation 2(d) of part A, chapter I in the International Convention for Safety of Life at Sea, 1974. (SOLAS 74) so as to not to exclude U.S. flag vessels from participating in response, restoration, and/or recovery activities supporting efforts on U.S. territorial islands.

The Subcommittee recommends that this be accomplished in two stages:

- As an immediate, short-term step, the USCG should republish CG-CVC Policy Letter 17-06 (Ch-1) (with revisions, noted in Appendix D) as soon as practicable.

- In the longer term and as resources permit, the USCG regulatory staff should publish the relevant changes to 46 CFR Subchapter D and Subchapter I to align the regulatory definition of an international voyage with the SOLAS international voyage definition as recommended above.
2. The Subcommittee recommends alternative considerations for the use of appropriately equipped, multi-certificated vessels for the fulfillment of fuel oil resource requests. Any double-side or double-bottom spacing requirements (per 33 CFR) that exceed those required by Subchapter L, should be waived when that vessel is engaged in response, restoration, and/or recovery activities during times of declared disaster. Since OSVs are verified to be safe and fit-for-purpose to transfer fuel oil to offshore units, considering all of the identified risks in undertaking such operations, the same vessels shall be considered suitable and safe for transfer of fuel to shoreside or near-shoreside facilities, including vessels. The lower speed, shallow draft, and lower tank capacity of the OSV design make the tank ship double-bottom and double-side standards inappropriate for application to an OSV or dual Subchapter I and Subchapter L certificated OSV. This change would expand the pool of US-flag vessels able to participate in disaster response operations and minimize the perceived need for Jones Act waivers.
 3. The Subcommittee recommends the creation of an endorsement for inclusion in the COI for appropriately risk assessed vessels designating them as Response, Restoration, and Recovery Vessels (TRV). Such an endorsement will provide additional reserves, supplementing the capabilities of the existing Multi-Service OSVs and federal resources. See response to Question 1(c), above, and Appendices E and F.
 4. The Subcommittee recommends that during officially declared disasters and until such time as CFR definitions of “International Voyage” are revised, transits between the contiguous U.S. and Puerto Rico or the U.S. Virgin Islands shall be not be considered international voyages. Suspension of these defined international voyages specified in 46 CFR, Chapter I will allow for qualified multi-certificated and/or non-multi-certificated OSVs to support the response, recovery, and restoration efforts in support of U.S. citizens and interests impacted by, or potentially impacted by, natural and manmade disasters.
 5. The Subcommittee further recommends that, in addition to those exemptions provided within 46 CFR noted above, specifically Regulation 2(c)(1) & (2), a third exemption shall be provided by the Commandant or his authorized representative if the vessel...

“(3) carries the TRV endorsement on its COI and is engaged in activities related to response, recovery, or restoration following a natural or manmade disaster as determined via federal declaration. Such vessel must meet any additional safety requirements as may prescribed for the voyage by the Commandant.”

Reference(s)

- Appendix D – Proposed Policy Letter – Guidance on Disaster Relief Vessels Response Posture and Efforts to Support U.S. Territorial Islands
- Appendix E – Proposed Policy Letter – Response, Restoration, and Recovery Vessels (TRV)
- Appendix G – Sample Vessel, Activity, and Capability Matrices
- RRATS 20190320 Interim Report

Other Considerations

Subcommittee deliberations revealed the complexities of addressing disaster restoration and recovery operations that, by nature must involve the input and support of numerous entities and consideration of interconnecting rules and requirements. As much as various responsibilities and interests overlap, they likewise create gaps of understanding. A comprehensive response to any and all potential disaster scenarios therefore can only be provided on a continuum and based on ongoing discussions and communications between stakeholders.

The answers to a single Task Statement involving a topic of this magnitude can only serve to being a process of improvement. One step in this progression is identifying and addressing grey areas in the existing procedures and rules. The Task Statement deliberations revealed several potential opportunities for improvement.

General:

Most importantly, in researching and discussing the Task Statement with industry representatives, government entities, and response organizations it became evident that the scope of any effective response effort requires expertise from a wide variety of stakeholders. The U.S. marine industry carries within its fleets the resources to assist in any marine related response activity. However, the effective application of resources involves communication and cooperation between professionals spanning numerous agencies and organizations.

Therefore, the topic of restoration and recovery capabilities within the offshore sector warrants continuing deliberation both internal to the USCG as well as external, involving multiple government agencies, industry stakeholders, and potentially international organizations.

Personnel in Distress:

Existing and policies and regulations address industry response to those in distress including the transport and berthing of displaced persons. Additional proposed policies outlined herein only touch on the availability of industry resources to support distressed citizens. In the event of a crisis some vessels that may be capable of responding to persons in need may not be legally capable of doing so. So-called “Good Samaritan” laws and other regional and international policies address only some of these concerns and may not be clearly understood by all stakeholders.

Capability Matrix:

The Capability Matrix approach proposed herein attempts to bridge the gap between the pragmatic capabilities of the industry’s existing resources and the awareness and understanding of those capabilities within (and between) government agencies. This is only a proposed solution and the matrices included in the Appendices serve as examples, primarily for use in communicating a company’s fleet capabilities to governmental organizations. The final approach to these issues will most likely need to be a modified and reworked version of this proposal, adjusted to suit the particular needs of affected parties and specific situations.

Third Party Requests for Services:

Finally, government entities may not be the sole source of service and support requests during times of declared disaster. Other entities requesting support may include non-government entities such as utility providers, private companies, and charitable organizations. Although reflecting urgent needs for assistance, these additional requests would likely be received external to government agency communication channels, circumventing response protocols and challenging official response mechanisms by further stretching resources. There are no known or clearly understood protocols for addressing this type of request.

Other Recommendations

1. General – The Subcommittee recommends that additional Task Statements, Subcommittees, and/or industry work groups should be initiated both within and between concerned government agencies, maritime-related Federal Advisory Committees, maritime industry organizations, and industry stakeholders. The objective being to better understand the existing capabilities of the industry and to capitalize on the national resources already available to support and assist affected areas during times of crisis.
2. Personnel in Distress – Different aspects of a maritime industry response to personnel in distress, transport of displaced citizens and/or other persons, etc. is covered under various Policy Letters and both regional and international regulations. As an example, if required in response to an emergency, maritime assets are obligated to answer requests for assistance as noted within the Maritime Emergency Response Guide. Further guidance is provided in the proposed Policy Letters provide in the Appendices. The Subcommittee recommends that any other guidance required to facilitate the appropriate maritime industry response to persons in distress is considered in subsequent Task Statements, work groups, etc. and in continued discussions between industry stakeholders and appropriate government entities.
3. Capability Matrix – In light of the difficulty in categorizing capabilities and impediments, the Subcommittee recommends that the U.S. Coast Guard and other concerned federal agencies, in cooperation with industry stakeholders, adopt a matrix style approach to vetting appropriate resources as outlined within the response to Question 1(c), above, with reference to the Sample Capability Matrices provided in the Appendices.
4. Third Part Requests for Services – The Subcommittee recommends the USCG clarify existing protocols or establish additional work groups and/or Task Statements to address the topic of third-party contractors and other non-government entities requesting services from qualified vessels outside of official service requests from government agencies.

CONCLUSION

Summary

This report represents the Subcommittee's consensus response to the questions and requests laid out in the official Task Statement, "Use of Offshore Supply Vessels (OSVs) and other vessels in restoration and recovery efforts."

While this document is the Final Report of the Restoration & Recovery Activity Subcommittee for this Task Statement it should only represent a foundational step in an ongoing cooperative effort between the U.S. maritime and offshore industries, the U.S. Coast Guard, U.S. government response organizations, and the U.S. citizens and interests which these entities serve during times of crisis.

REFERENCES

Christensen, E. (2012, Jun 01). CG-CVC Policy Letter No. 12-03 – Endorsement of Offshore Supply Vessels (OSV) as Oil Spill Response Vessels (OSRV). U.S. Department of Homeland Security, United States Coast Guard.

Commandant, Coast Guard District 8 (m) (25 Nov 1999). Certification of Multi-Service Vessels. U.S. Department of Transportation, United States Coast Guard.

Commandant, U.S. Coast Guard (1995, Feb 13). MVI Policy Ltr No. 1-95 – Oil Spill Response Vessels (OSRVs). U.S. Department of Transportation, United States Coast Guard.

Commandant Instruction (2014, Jun 26). COMDTINST 16000.28A – Marine Transportation System Recovery Planning and Operations.

Commander, Eighth Coast Guard District (2001, Jul 05). D8(m) Policy Ltr 09-2001 – Certification of Multi-Service Offshore Supply Vessels (OSVs). U.S. Department of Transportation, United States Coast Guard.

Department of Homeland Security (2016, Jun). National Response Framework, Third Edition, June 2016.

Kaminski, T. (2017, Sept 01). D8(dp) Policy Ltr 01-2017 – Temporary Emergency Berthing Vessels. U.S. Department of Homeland Security, United States Coast Guard.

Medina, M. (2017, Oct 2017). CG-MMC Policy Letter No. 02-17 (CH-1), Credentialing of Seafarers Working on Board Hurricane Marine Relief Vessels Involved with the Emergency Support of the Commonwealth of Puerto Rico and U.S. Virgin Islands. U.S. Department of Homeland Security, United States Coast Guard.

Restoration and Recovery Activities Subcommittee (2019, March). Interim Report. Report No. RRATS 20190320.

U.S. Committee on the Marine Transportation System Marine Transportation System – Resilience Integrated Action Team (RIAT). *The 2017 Hurricane Season: Recommendations for a Resilient Path Forward for the Marine Transportation System*.

U.S. Department of Transportation (2015). Maritime Emergency Response Guide.

U.S. Senate (2018, Nov 14). Frank LoBiondo Coast Guard Authorization Act of 2018; Title XIII- - Miscellaneous; Sect. 838. Emergency Response.

Williams, J. (2017, Oct 16). CG-CVC Policy Letter 17-06 (CH-1) – Guidance on Hurricane Maria Relief Vessels Response Posture and Efforts to Support the Commonwealth of Puerto Rico and U.S. Virgin Islands. U.S. Department of Homeland Security, United States Coast Guard.

APPENDIX A PROPOSED POLICY LETTER – CERTIFICATION OF MULTI-SERVICE OFFSHORE SUPPLY VESSELS (OSV)

Subj: Certification of Multi-Service Offshore Supply Vessels (OSV)

Ref: (a) D8 Policy Ltr 09-2001, dated 5 July 2001
(b) D8 Policy Ltr 01-2004 dated 30 Jun 2004
(c) Marine Safety Manual, Vol III, Part B, Chapter 6

- 1) **Purpose:** This letter provides policy by which certain vessels may be designed, inspected, and certificated for operation as an OSV under 46 CFR Subchapter L as well as for other operations within the scope of 46 CFR Subchapter I (Cargo and Miscellaneous Vessels) or Subchapter M (Towing Vessels). Subsequent modifications of this policy may be developed to broaden its applicability to existing OSVs certificated under 46 CFR Subchapter I. This policy does not apply to any type of passenger vessel (Subchapters T, K, or H) or to liftboats certificated under Subchapters I or L.
- 2) **Discussion:**
 - a) Previous to reference (a), OSVs had been restricted exclusively to the support of the offshore energy and mineral industry. Increasingly, these vessels have requested changes in certification to freight, industrial or towing vessels. Although the regulations allow for multi-certification, OCMI's have been reluctant to issue a certificate, let alone two, without conducting an inspection each time the operator physically altered the vessel as it shifted operations from one subchapter to another. In fact, past practice has been to issue one certificate at a time for the appropriate inspection subchapter, thus creating an administrative and inspection burden each time a vessel changes operations. Issuing a single Certificate of Inspection (COI) covering multiple inspection subchapters allows more judicious use of Coast Guard resources, while at the same time ensuring public safety and facilitating industry. The Eighth Coast Guard District took the lead in developing a multi-certificated vessel policy. With the concurrence of Commandant (G-MOC), D8 (mvs) published reference (a) based on the input from a work group consisting of industry and Coast Guard representatives. The use of that policy has served both the industry and Coast Guard well within District 8 over the past 18 years.
 - b) This policy letter is solely applicable to OSVs certificated under 46 CFR Subchapter L standards which have a need to engage in both offshore supply service and various missions that are not in support of the offshore industry, such as the carriage of freight, industrial operations, or towing vessel service. As a general rule, multi-certificated vessels should be designed, built, and outfitted to the more stringent applicable standards of Subchapters L, I, or M (as appropriate) and applicable SOLAS requirements (if requested). This concept is the fundamental philosophical basis for multi-certification of OSVs. Operational requirements imposed on the vessel will be dependent on the operation the vessel is engaged in at that time (e.g. manning, carriage of certain cargoes, etc.). Under this policy, multi-certification will only be available to vessels in the OSV, towing, cargo or miscellaneous vessel categories. In this policy, tonnage thresholds expressed in terms of "gross tons" are applied using GRT, if assigned, and GT ITC if GRT is not assigned, as is the practice in Subchapter L. The phrase "Large OSV" in this policy means an OSV of at least 500 GRT or 6,000 GT (ITC). When operating as a towing vessel is discussed, this applies to a vessel certificated under subchapter I and of 300 gross tons or more, unless otherwise noted.
 - c) Multi-certification is acceptable when the OCMI is reasonably satisfied that the vessel is constructed, maintained, and outfitted in compliance with the applicable regulations regardless of which subchapter the vessel is operating under at any given time. With the vessel material condition and outfitting fixed, operating conditions, manning, and possibly total persons allowed will vary depending on the applicable regulations and will be addressed

accordingly in a COI endorsement for the alternative certification. The material condition and outfitting of the vessel should not normally be among the variables, otherwise the OCMI is put in a position of verifying compliance as changes are made.

- d) This policy incorporates the following assumptions:
1. Only one COI should be issued to each multi-certificated vessel.
 2. A multi-certificated vessel must conform at all times to the most stringent design and equipment standards of the applicable rules and regulations (including SOLAS if applicable). Operational requirements, such as manning, carriage of oil, licensing of crew, etc., will vary depending on actual vessel use.
 3. Conditions of operation for each unique certification subchapter will be specified on the COI; therefore, additional inspections should not be required each time a change in certification takes place. It is the responsibility of the vessel owner, operator, and master to ensure that the vessel is operated within the terms and conditions specified on its COI.
 4. User fees for multi-certification will be based upon the certification that results in assessment of the higher user fee amount.
- e) This policy letter does not address the multi-certification of existing OSVs certificated under 46 CFR Subchapter I or T. Although multi-certification of these vessels is not prohibited by this policy, there are significant technical and regulatory issues associated with multi-certification of OSVs certificated only under 46 CFR Subchapter I or T. Possible reassessment of these existing Subchapter I or T OSVs seeking multi-service certification may be required due to loss of water ballast and other tonnage exemptions available exclusively to vessels engaged in OSV service. If the vessel's new tonnage is greater than 500 gross tons, the requirements of SOLAS (for vessels on international voyages) and the marine engineering and electrical regulations in 46 CFR Subchapters F & J will have to be carefully considered. That analysis is beyond the scope of this policy and will be handled on a case-by-case basis if requested.
- f) Currently, vessels inspected under 46 CFR Subchapter I and Subchapter L are allowed to participate in the Alternative Compliance Program (ACP). Inspection of multi-certificated vessels (under 46 CFR Subchapters I and L) may be conducted under the provisions of the ACP or traditional USCG inspection at the option of the vessel operator. Those vessels also needing Towing COI authority that are 300 gross tons or more and are certificated under Subchapter I (or Land I) need only demonstrate compliance with 46 CFR 174 Subpart E to be issued towing endorsements. A Subchapter L OSV seeking Subchapter M certification that is less than 300 gross tons will be handled on a case-by-case- basis until appropriate policy is published.
- 3) **Action:** All OCMI's shall:
- a) Use the guidelines provided by this policy letter to promote a consistent approach to certification and operation of multi-certificated OSVs.
 - b) Use the guidelines in enclosure (1) when evaluating multi-certification of OSVs designed and built to the standards of 46 CFR Subchapter L.
 - c) Use the guidance in enclosure (2) when considering automation requirements for multi-certificated vessels.
 - d) Use the sample COI endorsements in enclosure (3) when developing COI endorsements for multi-certificated vessels.

- e) Consider the table in enclosure (4) to help determine the differences between the requirements of 46 CFR Subchapter L, I and SOLAS.
 - 4) Equivalencies may be granted by (TBD) in certain cases where it can be demonstrated that the safety of a vessel or its crew will not be affected by accepting an alternative standard. All such requests must be forwarded to CG-CVC via the cognizant OCMI who should provide an endorsement and recommendations.
- Encl: (1) General guidance on multi-certification of OSVs certificated under 46 CFR Subchapter L
- (2) Engineering Automation Considerations
 - (3) Sample Multi-Certificated Vessel COI Endorsements
 - (4) Comparison Table: 46 CFR Subchapter L, I, and SOLAS

Encl (1) General Guidance on Multi-Certification of OSVs Certificated Under 46 CFR Subchapter L

- 1) **General:** This enclosure is designed to highlight a number of significant design and operational differences between OSVs constructed to the standards of 46 CFR Subchapter L and vessels certificated as cargo and miscellaneous vessels under 46 CFR, Subchapter I.
 - a) This list is not all-inclusive; however, it describes a number of the more significant issues encountered during multi-certification of OSVs. This information was compiled using the version of Subchapter L, M, and I existing on January 1, 2019 (NOTE: No SOLAS review was made for any post 2001 changes).
 - b) Also note that an OSV of at least 6,000 GT ITC (500 GRT if GT ITC is not assigned) must obtain and maintain the following international certificates as a prerequisite to obtaining a Certificate of Inspection. Holding these international certificates greatly facilitates compliance with Subchapter I requirements.
 - Cargo Ship Safety Construction Certificate in accordance with the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS, 1974, as amended).
 - Cargo Ship Safety Equipment Certificate in accordance with SOLAS, 1974, as amended.
 - Safety Management Certificate in accordance with SOLAS, 1974, as amended.
 - International Oil Pollution Prevention Certificate in accordance with the International Convention for the Prevention of Pollution at Sea, as amended (MARPOL 73/78).
 - International Air Pollution Prevention Certificate in accordance with MARPOL 73/78.
 - International Load Line Certificate.
 - International Ship Security Certification, Ch. 11.
- 2) **Application for Inspection:** Vessel owners and/or operators must submit a Coast Guard Application for Inspection (CG Form 3752) or locally accepted equivalent form to the cognizant OCMI to have a new construction or existing Subchapter L OSV considered for multi-certification. The Application for Inspection must specify the operation(s) in which the vessel wishes to engage (e.g. freight, industrial and/or towing).
 - a) An OSV can legally serve as the host for industrial operations such as diving, well stimulation, subsea construction, etc., that specifically support exploration, exploitation, or production of offshore mineral or energy resources. Industrial operations that do not specifically support exploration, exploitation, or production of offshore mineral or energy resources must be hosted/conducted by a certificated industrial vessel.
 - b) An OSV can legally “occasionally” tow a MODU or other unit specifically used to support exploration, exploitation, or production of offshore mineral or energy resources. 46 CFR Subchapter M did not define “occasional”, but is expected to do so soon. If an OSV plans to perform more than occasional towing, then towing certification should also be sought.
- 3) **Plan Review and Inspection:**
 - a) Plan Review: The Commandant is tasked with the responsibility to determine that vessels subject to inspection meet the applicable sections of the regulations. The primary means of carrying out this task, in addition to actual inspection of a vessel by field units, is by review and approval of vessel plans and specifications. The general requirements for plans, drawings, and blueprints are found in 46 CFR 2.90-1. Specific recommended practices and procedures for the submittal of plans and specifications are detailed in NVIC 8-84 (Recommendations for the Submittal of Merchant Vessel Plans and Specifications). Plans may be submitted to the OCMI, the Marine Safety Center (MSC) or to the American

Bureau of Shipping (ABS) in accordance with NVIC 8-84 or the Memorandum of Understanding between the Coast Guard and ABS as discussed in NVIC 10-82, CH2 (Plan Review and Inspection Tasks Performed by the American Bureau of Shipping (ABS) for New Construction or Major Modification of U.S. Flag Vessels). Plan submission in accordance with NVIC 10-92, Change 2 (Coast Guard Recognition of Registered Professional Engineer Certification of Compliance with Coast Guard Requirements) is also allowed. Vessel owners must inform the cognizant OCMI of their desire to have the plans reviewed for multi-service certification. Plan review will not begin by either party until receipt of an Application for Inspection by the cognizant OCMI has been confirmed.

- b) Plan submission: Plan submission to the Marine Safety Center will be required for all new construction projects involving multi-certification. In addition, OCMI's are strongly encouraged to ensure that vessel owners/operators submit plans to the Marine Safety Center for existing Subchapter L OSVs applying for multi-certification. In addition to the plans identified in 46 CFR 127.110, the plans noted in 46 CFR 91.55-5(b) will also be required as applicable.
- c) OCMI Involvement: Frequently, the local OCMI may have knowledge or concerns regarding the design or operation of a particular vessel or class of vessels. In these cases, the MSC should be notified promptly of any items that the OCMI considers worthy of special consideration. OCMI's are encouraged to communicate with the MSC or Commandant (G-CVC(TBD)), as appropriate, when requests are received for inspection of new construction or conversions of multi-certificated vessels for which approved plans and related correspondence are not held.
- d) Engineering vital systems and automation: OSVs less than 500 gross tons which meet the automation requirements in 46 CFR Subchapter L need not meet any of the additional automation requirements in 46 CFR Parts 61 and 62. For Subchapter L OSVs greater than 500 gross tons, with any vital system automation, a Coast Guard technical review must be conducted to ensure compliance with the requirements in 46 CFR 61.40 and the applicable sections of 46 CFR part 62.
 1. Engineering Control Center (ECC) Definition: The centralized engineering control, monitoring, and communications location. Because of the compact environment and location of vital machinery within the enginerooms of most OSVs, the engineroom may be considered as the ECC. To be considered an ECC, an OSV's engineroom must contain all the vessel's vital propulsion and electrical generating equipment and associated control systems. Vital valves, motors and control systems must be operable from above the deck plates. A separate and distinct ECC will not be required for the purposes of this policy letter.
 2. Minimally attended: Vessels under consideration for a minimally attended engineroom must undergo a review to ensure compliance with 46 CFR 61.40 and 62.01 through 62.50-20. Minimally attended machinery plants are automated, but not to a degree where the plant could be left unattended. Emphasis is placed primarily on centralized remote control and monitoring of the machinery plant and machinery spaces. In addition, adequate communications are required for the safety of the engineer and to allow summoning of additional personnel in case of an equipment emergency. In most cases, one licensed engineer will be on watch at all times., A policy decision was developed by G-MSE-3 regarding the equivalency of the American Bureau of Shipping's ACC notation to the U.S. Coast Guard's "minimally attended" regulations (see G-MSE-3 memorandum "Minimally Attended/ACC Holding File" dated 23 April

- 2001). The Coast Guard concluded that six additional items beyond ABS ACC notation would be required to meet USCG minimally attended requirements.
3. Periodically unattended: Vessels under consideration for periodically unattended enginerooms must undergo a review to ensure compliance with 46 CFR 61.40 and 62.01 through 62.50-30. If SOLAS requirements are applicable, plans must be reviewed to determine if compliance exists with the regulations of Subpart E of Chapter II-1. The regulations set forth in Subpart E of SOLAS are only one grouping of regulations that apply to periodically unattended machinery spaces. The following SOLAS regulations apply to vessels with a periodically unattended machinery spaces endorsement: II-1/46; II-1/47; II-1/48; II-1/49; II- 1/50; II-1/51; II-1/52; II-1/53; II-2/4.3.4.3; II-2/11.7; II-2/14; II-2/15.5 (SOLAS 1997, Consolidated Edition).
- e) Second means of Egress from occupied spaces: For OSVs operating as a freight vessel with a periodically unattended, minimally attended, or fully manned engineroom, compliance with 46 CFR 92.10-5 must be verified. If the vessel has a separate engineering control center (ECC), there must be two means of escape from the ECC (one of which does not go through the engineroom).
 - f) Firefighting:
 1. Fixed Systems: On vessels greater than 1500 GT, exterior firefighting stations may substitute a Siamese configuration using 1½ inch diameter hoses instead of 2½ inch diameter hoses as is allowed for interior locations by 46 CFR 95.10-10(b)(a). For vessels employing this substitution, the fire main system must meet the water demand requirements in 46 CFR 95.10- 5(c) and 95.10-15(c) which require the fire pump capacity be determined as if 2½ inch outlets had been provided. If a larger capacity fire pump is required on an existing OSV to meet this requirement, an analysis of the emergency generator load is necessary.
 2. Portable Equipment: Subchapter L requires compliance with 46 CFR 132.220, Subchapter I requires compliance with Subchapter W, a Large OSV must comply with SOLAS and the Subchapter D requirements in 46 CFR 34.50-10, a towing vessel may either comply with SOLAS or 46 CFR 142.230. Each requirement is similar, despite small semantic differences in terminology or organization of the portable extinguisher table. As such, compliance with the requirements of Subchapter L or the Large OSV requirements is determined to be substantially equivalent to the Subchapter I or M requirements for a multi-certificated OSV.
 - g) Structural Fire Protection: 46 CFR Subchapter L has minimal requirements for structural fire protection (46 CFR 127.220-225). Subchapter I requires more rigorous structural fire protection for all cargo and miscellaneous vessels over 4000 GT and for those industrial vessels over 300 GT that also carry more than 12 industrial personnel (46 CFR 92.07). SOLAS structural fire protection requirements are also applicable to vessels to which SOLAS applies. Also, 46 CFR 127.225 requires each Large OSV to comply with the provisions of Chapter II-2 of SOLAS, 1974, as amended, for Method IC cargo ships.
 - h) Rescue Boats: Both 46 CFR Subchapter I and Subchapter L require rescue boats. Subchapter L, however, allows substitution of the required rescue boat with a “workboat or launch” or an alternative personnel recovery device (sometimes referred to as a rescue platform) in certain circumstances (46 CFR 133.135). These alternatives are not available for vessels inspected under 46 CFR Subchapter I. Thus, multi-certificated vessels will be required to carry a Coast Guard approved rescue boat at all times, not simply when operating under Subchapter I. Subchapter M does not address carriage of rescue boats.

- i) Stateroom capacities:
1. 46 CFR Subchapter I does not specifically mention accommodations for industrial personnel. However, the Coast Guard has gone on record that there should be no difference in accommodation spaces for a vessel's regular complement of industrial personnel and the required crew (e.g. Federal Register of December 4, 1978, Preamble of the final rule for Mobile Offshore Drilling Units, page 56791). Industrial personnel on board industrial vessels are employed and berthed in a manner and duration very similar to that encountered by the industrial personnel on MODUs. Accordingly, the application of a MODU accommodation standard (46 CFR 108.201) would philosophically and logically be more appropriate than an OSV standard (for offshore workers) for vessels being employed as industrial vessels.
 2. 46 CFR Subchapter L OSVs engaged in freight, towing or industrial vessel operations will have the number of persons on board, based on the berthing specifications of 46 CFR 127.280(a). Thus, a multi-certificated vessel authorized for OSV and one or more cargo or miscellaneous vessel operations shall have sleeping rooms of such size that there is at least 30 square feet of deck area and a volume of at least 210 cubic feet of space for each person accommodated. This standard applies to vessel crew, industrial personnel and offshore workers. Subchapter M has no specific crew berthing requirements for an OSV under 300 gross tons.
 3. The total number of persons on board while a vessel is engaged in operations as a freight, towing or industrial vessel will be based on the berthing as follows:
 - a. Each stateroom may accommodate a maximum of 4 persons unless specific approval has been granted by Commandant, in which case a maximum of 6 persons may be accommodated in any one stateroom.
 - b. Where practical, the Master and Chief Engineer should have individual staterooms per 46 CFR 92.20-20. The remaining officers may be berthed two per room.
 - c. Staterooms for crew members must be separate from those provided for offshore workers (or industrial personnel) per 46 CFR 127.270(h) unless alternative arrangements are approved by the OCMI.
- j) Hospital Space: A hospital space is required (46 CFR 92.20.35) when a vessel is operating under Subchapter I (freight, industrial or towing) on voyages of more than three days duration and when there are 12 or more crew on board. The maximum number of crew required in any operating condition on the vessel's Certificate of Inspection will be used to determine the need for a hospital space, regardless of the number of installed accommodations. When a hospital space is required, an existing stateroom may be designated as a hospital space. This stateroom must be configured for single occupancy so long as it is utilized as the required hospital space. This space must not be normally occupied when set aside as the designated hospital and must have a washbasin with hot and cold running water installed in the space, or immediately adjacent.
1. The total persons allowed on the vessel while it operates as a freight or industrial vessel must be reduced, if necessary, to account for any reductions in required berthing when a stateroom is set aside as the required hospital space.
 2. In a relevant appeal (Commandant G-MOC letter 16711 of 6 March 2000), the Commandant ruled that when a vessel is operating as an industrial or freight vessel on an oceans route not more than 200 miles from shore and not on an international voyage, the requirement for a hospital space may be waived provided the following provisions are met:

- a. An approved medical emergency evacuation procedure must be on board each vessel that participates in the multi-certification program. The medical emergency evacuation procedure must be approved by the cognizant OCMI.
 - b. The medical emergency evacuation procedures must include the procedures for segregating the injured/sick crewmembers until emergency evacuation can be affected.
 - c. The vessel must have resources necessary to adequately respond to crew medical emergencies including evacuations of a sick or injured crewmember.
 - d. The OCMI shall place a permanent note in each affected vessel's file indicating that the vessel is prohibited from engaging in any international voyages until a hospital space meeting the requirements of 46 CFR 92.20-35 is provided on the vessel.
- k) Streamlined Inspection Program (SIP): A vessel's status as a multi-certificated vessel does not necessarily invalidate the opportunity for a vessel to remain or participate in SIP. However, vessels that have undergone a major conversion as defined by the Marine Safety Center (MSC), and as a result of retrofitting for the purposes of being certified for multi-service, the local OCMI will make the determination if the vessel will remain in the SIP.
- l) Alternative Compliance Program (ACP): Currently, vessels inspected under 46 CFR Subchapter I and Subchapter L are allowed to participate in the Alternative Compliance Program (ACP) while towing vessels certificated under Subchapter M are not. A subchapter M vessel either uses the Towing Safety Management System (TSMS) or a traditional USCG conducted inspection process for certification, in general.
1. 'NVIC 2-95, Change 3, "U.S. Coast Guard's Alternative Compliance Program," describe procedures for accepting certain plan review, and inspection functions performed by recognized classification societies. Plan review and inspection of multi-certificated vessels (under 46 CFR Subchapters I and L) may be conducted under the provisions of the ACP.
 2. Those ACP vessels certificated under both Subchapter I and L also seeking towing COI endorsements that are 300 gross tons or more must only demonstrate compliance with 46 CFR 147 Subpart E for towing certification to their recognized classification society. A Subchapter L OSV seeking Subchapter M certification that is less than 300 gross tons will be handled on a case-by-case- basis until further policy is published.
- m) Keel Cooler attachment to the hull: Subchapter L allows keel coolers to be attached to the hull with fillet welds while Subchapter I and Subchapter F require keel coolers to be attached by using full penetration welds. Keel coolers may be attached to the hull using the Subchapter L standard (fillet welds) for OSVs operating under multi-service certification as a cargo and miscellaneous vessel with the following restrictions:
1. The vessel must be designed to survive flooding of the space where the keel coolers pass through the hull plate. Only one compartment flooding need be considered at any one time, but the worst-case scenario must be analyzed for compliance with the damage stability standards required by Subchapter L; or
 2. If a keel cooler penetrates the hull in a compartment that is not normally considered for, or cannot pass the damage stability required for Subchapter L, isolation valves must be installed at or near each shell penetration. Each isolation valve must be easily accessible.

4) Operational requirements:

a) **Manning:** The fundamental manning difference between OSVs and freight and industrial vessels is that OSVs are allowed to use a “two-watch system” when engaged on a voyage of less than 600 miles (46 USC 8104(g)). Towing vessels are also allowed to use a two-watch system when engaged on a voyage of less than 600 miles. With limited exceptions noted below, other seagoing merchant vessels over 100 GT (including freight and industrial vessels) are required to use a three-watch system when at sea (46 USC 8104(d)). Thus, multi-certificated vessel COIs will have to be structured such that appropriate manning is specified for different vessel services and voyage lengths. The local OCMI is responsible for determining acceptable manning levels for vessels inspected in their respective OCMI zones. Recommended COI endorsements for manning under various operating conditions are included in enclosure (3). A discussion of deck and engine department manning on multi-certificated vessels is provided below.

1. **Deck Department Manning General:** The recommended manning scales provided in Volume III of the Marine Safety Manual may be used as a general basis for deck department manning for multi-certificated vessels operating as OSVs, freight, industrial or towing vessels. The prescribed manning will vary, particularly between OSV or towing and freight, or industrial operations. Under 46 USC, OSVs have been granted special treatment for deck (and engine) department manning. However, when a multi-certificated vessel is not operating as an OSV, it will be required to meet the generally higher manning requirements of the applicable service. The deck manning for licensed individuals is taken from the requirements of 46 USC 8301. The number of Able and Ordinary Seamen (AB and OS) will vary depending upon the OCMI's evaluation of the vessel and her operations.

a. **Deck Officers on Mechanically propelled vessels other than OSVs:**

- i. A licensed master is required on every vessel subject to Coast Guard inspection (46 USC 8301(a)(1)).
- ii. Three licensed mates are required on each vessel over 1000 gross tons (Regulatory Tonnage) per 46 USC 8301(a)(2). This statute provides for establishment of an alternate tonnage under Convention Measurement rules (46 USC 14302) if prescribed by interpretive regulation by the Secretary under 46 USC 14104. An alternate tonnage has not yet been established for this statute. Until alternate tonnage equivalencies are established, multi-certificated vessels that measure over 1000 gross tons under any tonnage measurement system must have three licensed mates (in addition to the master). On voyages of less than 400 miles this requirement may be reduced to two licensed mates (46 USC 8301(a)(2)(A)).
- iii. Two licensed mates are required on each vessel that measures between 200 and 1000 gross tons (Regulatory Tonnage). An alternate Convention Measurement tonnage is authorized but has not been established (46 USC 8301(a)(3)).
- iv. One licensed mate is required on vessels between 100 and 200 gross tons (Regulatory Tonnage). An alternate Convention Measurement tonnage is authorized but has not been established (46 USC 8301(a)(4)).

b. **Deck Officers on Offshore Supply Vessels:**

- i. OSVs on a voyage of more than 600 miles must have a master and two licensed mates (46 USC 8301(b)).

- ii. OSVs on a voyage of less than 600 miles must have a master and one licensed mate (46 USC 8301(b)).
 - iii. Large OSVs on a voyage of more than 600 miles must have a master and three licensed mates per 46 CFR Part 15.
 - iv. Large OSVs on a voyage of less than 600 miles must have a master and two licensed mates per 46 CFR Part 15.
- c. Unlicensed Deck Personnel:
- i. General: No United States laws or regulations prescribe the number of unlicensed Able Seamen or Ordinary Seamen to be carried aboard particular categories of vessels. This decision is left to the discretion of the OCMI following an evaluation of the vessel and her intended operations. The OCMI is responsible for ensuring that the vessel can be safely operated with her assigned complement of officers and crew.
 - ii. Historical Manning of Deck Crew: A review of numerous existing OSV and small cargo and miscellaneous vessel COIs has revealed that many OCMIIs have required one unlicensed member of the deck department to be on duty for each watch aboard the vessel. Thus, for a three-watch system many OCMIIs have required two Able Seamen and one Ordinary Seaman. For such vessels, the deck department consists of one licensed officer and one unlicensed crew member on duty together for each watch. For OSVs and towing vessels authorized a two-watch system on voyages of less than 600 miles, the unlicensed deck personnel are typically reduced to one Able Seaman and one Ordinary Seaman. The following statutory provisions must also be complied with in establishing deck crew manning:
 - [a] Three-watch system: At least 65 percent of the unlicensed deck crew must be rated as Able Seaman on vessels with a three-watch system (46 USC 8702(b)(2)).
 - [b] Two-watch system: At least 50 percent of the unlicensed deck crew must be rated as Able Seaman on vessels with a two-watch system (46 USC 8702(b)(2)(i)).
- d. Engine Department Manning General:
- [The manning level described below assumes that at least two individuals (one licensed engineer and one Oiler) is appropriate for each watch on a vessel with no or limited automation. Typically, for a vessel that meets the requirements for “minimally attended,” one licensed engineer is appropriate for each watch. For a periodically unattended engine room, one Chief Engineer and one Assistant Engineer should be considered as the “base case” engine department manning. The OCMI should consider the guidance in Volume III, Chapter 25 “Manning Requirements for Automated Vessels” in establishing the required manning for a periodically unattended engine room. The OCMI must be satisfied that the proposed engine department personnel will be satisfactory to operate the vessel’s engineering equipment on a continuing basis.]
- e. Engineering Manning (Cargo & Miscellaneous Vessel Services):
- [The following engine department manning levels have been developed as a general guideline for OCMIIs. The recommended engine room manning for a multi-certificated vessel operating in one of the cargo and miscellaneous vessel services (e.g. freight, industrial or towing) is shown below. The various manning levels are

based upon the level of engineroom automation and are also dependent upon the OCMI's evaluation of the vessel and crew.]

- i. Fully manned: 1 Chief Engineer, 2 Asst Engineers, 3 oilers
 - ii. Minimally attended: 1 Chief Engineer, 2 Asst Engineers
 - iii. Periodically unattended: 1 Chief Engineer, 1 Asst. Engineer*
 - * Provided the OCMI has reviewed, accepted and verified the vessel automation as well as the crew's ability to maintain the vessel and perform all required evolutions.
- f. Engineering Manning for OSV Service: 46 USC 8301(b) requires a licensed engineer on each OSV over 200 GT (Regulatory tonnage). This could either be a Chief Engineer or an Assistant Engineer. No specific number of unlicensed engine department personnel is required on an OSV by law or regulation. OCMI's have the authority to require additional engine department personnel (either licensed or unlicensed) but must base this requirement on information that these increases are necessary to ensure safety.
- i. Sample OSV Manning: Volume III of the Marine Safety Manual (MSM) provides a sample manning scale for OSVs that includes one Chief and two Assistant engineers and three oilers on voyages over 600 miles or; one Chief and one Assistant engineer and two oilers on voyages less than 600 miles. This sample manning level is based on no power plant automation. An OSV with a highly automated plant, as is typical, can and should be lower than the MSM table contingent upon the level of plant automation.
 - ii. Legal OSV Manning:
- g. Historical Manning of OSV Engine Department: A review of a number of OSV COIs reveals that many Eighth District OCMI's have limited required engine department personnel to a single Chief Engineer on OSVs over 200 gross tons. Presumably, this has been done based upon a review of engine automation, reliability, rapid shore-based logistic and repair support, plant redundancy (multiple engines, generators and propellers/thrusters making an engineering casualty less critical than on a non-redundant plant) and engine department workload. Thus, for many existing OSVs the designated engine department manning is one Chief Engineer. This manning level is not an absolute. Future workload and/or fatigue studies may be needed to verify proper OSV engine department manning, particularly considering the increasing size, complexity, operational requirements and endurance of these vessels.
- i. Requests for reduced engineroom manning: The OCMI shall consider all requests for reductions in engineroom manning. Acceptance by the Coast Guard of automated systems to replace specific crew members or to reduce overall requirements for crew members depends on the capabilities of the automated system; as well as the combination of crew members, equipment, and systems necessary to ensure safety of the vessel, personnel, and environment.
- [a] Each vessel operating condition should be considered including maneuvering; the ability of the crew members to perform each operational evolution, including to cope with emergencies such as fire and the failure of control or monitoring systems. In addition, the OCMI should consider the role of the vessel's crew in conducting a planned maintenance program

with regular testing procedures; as well as the automated system's demonstrated reliability during its initial trial period (usually 3000 hours) and its continued reliability.

[b] The OCMI shall consider all relevant information in determining a reduction in crew size to ensure there is no adverse effect on safety. A review of automated vessel experiences shows varying degrees of reliability in engineering automation. Accordingly, manning reductions in the engine department will be made only after a system has operated for a sufficient period of time to demonstrate its reliability, as well as the crew's ability to maintain the vessel and perform all required evolutions. The duration of the trial period shall normally be 3000 hours (based upon underway time).

2. **Log entries regarding service:** Any vessel operating as a multi-certificated vessel is required to have the type of service entered into the vessel's log book or record. Although an official logbook is not required for all vessels operating in domestic service, 46 CFR Subchapter L requires that an OSV without an official logbook have an unofficial log or record (46 CFR 131.610). This entry shall be made each time the vessel changes service. The master is to ensure that the service of the vessel (either freight, industrial, towing, or OSV) is officially noted in the vessel's logbook or record. This requirement should be entered into the conditions of operation on the vessel's COI.
3. **Bulk Liquid Cargo:** COIs should indicate that when a vessel is in freight, industrial, or towing vessel service, the vessel is prohibited from transferring bulk liquid cargoes to other vessels or offshore facilities. Additionally, a multi-certificated certified vessel when operating as a freight, industrial, or towing vessel may carry bulk liquid cargoes provided:
 - a. it meets the applicable double hull requirements of 33 CFR 157.10(d)
 - b. the bulk liquids have an aggregate volume of not more than 20% of the vessel's deadweight tonnage (DWT), and
 - i. For Freight vessels:
 - [a] Grades D & E cargoes may be carried in integral tanks
 - [b] Certain Grade C cargo and Grades D & E cargoes may only be carried in portable tanks per 46 CFR 98.30
 - ii. For Industrial vessels:
 - [a] Grades D & E cargoes may be carried in integral tanks
 - [b] Grades D & E and specifically named Grade C cargoes may be carried in portable tanks per 46 CFR 98.30

Encl (2) Engineering Automation Considerations

- 1) This enclosure was developed to highlight some of the more significant engineering automation differences between 46 CFR Subchapter L (OSVs), 46 CFR Subchapter F (Marine Engineering) and SOLAS. This enclosure will undoubtedly become obsolete over time as changes to Coast Guard regulations and SOLAS occur. Applicable Coast Guard regulations and SOLAS requirements will always prevail. This enclosure should NOT be used alone, as it is only intended to point out some of the more significant engineering automation differences between 46 CFR Subchapter L, 46 CFR Subchapter I and SOLAS. Subchapter M is intentionally excluded.
- 2) **Offshore Supply Vessel (L):**
 - a) Qualitative Failure Analysis (QFA) and Design Verification Testing Procedure (DVTP) are required for the remote or automatic propulsion controls.
 - b) Single non-concurrent failure of each easily replaceable component of the propulsion automatic or remote controls must not cause the propulsion engine, or the pitch of the propeller, to increase. Alternative manual means of propulsion control is required.
 - c) Propulsion control in the pilothouse is required.
 - d) Required alarms are very limited, and are only required for unattended machinery spaces.
 - e) Test procedures (periodic safety test procedures) and operations manual are required only for unattended machinery spaces.
 - f) For unattended machinery spaces, machinery displays (instrumentation) are required to be grouped or centralized in the machinery space.
- 3) **Sub I Vessel (>500 GT):**
 - a) A QFA is required for the automated systems listed in 46 CFR 62.20-3(b). Whenever a QFA is required, a DVTP document is also required.
 - b) Propulsion control failures are required to be failsafe, i.e., speed and direction of thrust maintained, until local manual or alternate manual control is in operation. Failures are required to be alarmed in the navigating bridge and the machinery spaces. NOTE: Credit is given to vessels with "independent duplicate propulsion systems", i.e., a vessel with multiple propellers with independent controls, do not have to maintain the speed and direction of thrust of the affected propulsion plant, provided the reduced propulsion capability of the vessel using the remaining propulsion plant(s) is not below that necessary for the vessel to run ahead at 7 knots or half speed, whichever is less, and is adequate to maintain control of the ship.
 - c) Propulsion controls in the pilothouse are not required for a vessel with a fully- manned machinery plant operation, implying propulsion control in the machinery spaces is required.
 - d) If pilothouse control is provided, a means to pass propulsion orders such as an Engine Order Telegraph (EOT) between the navigating bridge and the engine room is required. Normal propulsion control transfers require acknowledgement from the receiving station. Control location transfer between control stations required. Engine control room station must have means to take propulsion control from the navigating bridge or any other secondary control stations at any time. Local manual control must have the capability to override all remote and automatic control locations.

- e) Two sources of power are required for all primary control, safety control, instrumentation and alarm systems. One source must be from the emergency power source. Alarms are required to be continuously powered (typically provided by UPS or batteries.)
- f) Additional requirements for fully manned machinery spaces (46 CFR 62.30 and 62.35). This is NOT a comprehensive list.
 - 1. Primary closed loop propulsion control systems must be independent and physically separate from required safety control, alarm or instrumentation sensors.
 - 2. Propulsion machinery automatic safety trip control is required if continued operation could result in serious damage, complete breakdown, or explosion of the equipment.
 - 3. Remote controls for flooding safety equipment must remain functional under flooding conditions.
 - 4. Fire pump remote controls must include a fire main pressure indicator or fire main low-pressure alarm.
 - 5. Automatically filled fuel oil day tanks, settlers, and similar fuel oil service tanks that are filled automatically or by remote control must have high level alarm that annunciates in the machinery spaces, and an automatic fuel-fill shutdown control system or overflow arrangement.
 - 6. Starting capacities for main engines and ship's service generator prime movers require a certain number of consecutive starts, depending on type of starting system and propulsion engine.
- g) Additional requirements for minimally attended machinery plant operation (46 CFR 62.50-20). This is NOT a comprehensive list.
 - 1. ECC must include control and monitoring of:
 - a. propulsion plant, propulsion auxiliaries,
 - b. electrical power generation,
 - c. machinery space fire pump,
 - d. bilge pump control to counter machinery space flooding, and
 - e. the ability to place on-line the required standby systems (unless systems are automatically controlled) and to shutdown such equipment when necessary.
 - f. Minimum alarms and instrumentation are specified in 46 CFR Table 62.35-50.
 - 2. Personnel alarm (dead-man alarm) required.
 - 3. Machinery space fire alarms must activate alarms throughout the machinery spaces and engineers' accommodations. The fire alarms in the ECC and navigating bridge must visually indicate which machinery space is on fire.
 - 4. Watertight doors in required subdivision bulkheads must be Class 3 watertight doors, and must be controlled from the ECC and navigating bridge.
 - 5. Controls of sea inlet and discharge valves, and the emergency bilge suction, must be located and arranged to allow time for operation in the event of flooding. Time consideration in the proper location of the valve operators, must include flooding detection, crew response and valve control operation time.
 - 6. Engineers' call system (operable from the ECC) required.

7. ECC must have controls and instrumentation necessary to place the ship's service and propulsion generators in service in 30 seconds.
 8. Switchboard distribution, propulsion and generator controls must be located in the ECC, or additional requirements apply if located outside the ECC.
 9. Maintenance program required.
- h) Additional requirements for periodically unattended machinery plant operation (46 CFR 62.50-30). This is NOT a comprehensive list.:
1. Required redundant vital auxiliaries and power sources must automatically transfer to the back-up unit upon failure of the operating units.
 2. Capacity of fuel oil service tanks to be determined by the OCMI, depending on the route of the vessel, otherwise, must be sufficient for 24-hour operation at normal power, 8 hours for automatically filled tanks. Low fuel oil level alarm is required.
 3. Starting system receivers, accumulators or batteries must be automatically and continuously charged.
 4. Engineer's assistance needed alarm must be activated when the alarm system normal source of supply fails, and when an alarm at the ECC is not acknowledged within a period of time where an engineer is expected to respond to the alarm.
 5. ECC alarms that require immediate attention of the navigating bridge officer for the safe navigation of the vessel must be extended to the pilothouse.
 6. All required ECC alarms must be extended in the engineers' accommodations. This may be in the form of a summary alarm.
 7. Fire and flooding alarms must not be summarized.
 8. A fire control station is required. The station must be outside the machinery spaces.
 9. Daily check-off list must be completed prior to leaving the machinery plant unattended.
 10. Standby ship's service generator must automatically start and assume the ship's service loads within 30 seconds to permit propulsion and steering, and to ensure the safety of the vessel, and automatic restarting of essential auxiliaries. The emergency generator is not considered for this purpose. See item 4.e.(4) below under SOLAS which allows the administration to dispense with the continuity of power requirements outlined in this paragraph for vessels of less than 1600 gross tons.
 11. If ship's service power is supplied by more than one generator in parallel operation, provisions to prevent overload of the remaining generator to ensure the remaining generator are kept in operation to permit propulsion and steering, and to ensure the safety of the vessel.
- 4) **SOLAS**:
- a) Contains no provisions to verify compliance with the failsafe regulations.
 - b) Same as Paragraph 3.b (above), for Subchapter I vessels, except the NOTE does not apply for SOLAS vessels.
 - c) Propulsion controls required in the navigating bridge for periodically unattended machinery plant operation.

- d) Provisions for continuous manual supervision from a control room is similar to a minimally manned machinery plant operation for Sub I vessels, Paragraph 3(g), above.
- e) Additional requirements for periodically unattended machinery spaces:
 1. Crankcase oil mist detectors or bearing engine temperature monitors or similar devices are required for internal combustion engines of 2250kW and above or having cylinders of at least 300 mm bore. As per D8(m) Policy Letter 05-2001: It has been determined by G-MSE that high crankcase pressure switches are an equivalent to oil mist detectors, required by SOLAS II-1/47.2, on medium sized (900 to 5000hp) Electro-Motive Division (EMD) General Motors Corp two cycle engines. The difference between the two systems is that the detector senses misted oil and a high crankcase pressure switch senses the loss of a vacuum in the crankcase. The intent of both systems is to prevent the occurrence of a crankcase fire as a result of a mechanical engine failure by signaling an alarm and /or shutting down the engine.
 2. The number of consecutive automatic starts of propulsion machinery must be limited and alarmed. The low starting air pressure alarm must be set at a level to permit starting operations of the propulsion machinery locally. This typically applies to reversible main engines and not to OSVs.
 3. SOLAS II-2/14 Fixed fire detection and fire alarm systems for periodically unattended machinery spaces. A fixed fire detection system and fire alarm system of an approved type in accordance with the relevant provisions of regulation 13 shall be installed. Another area of concern is regulation 14.2 which states; except in spaces of restricted height and where their use is especially appropriate, detection systems using only thermal detectors shall not be permitted.
 4. The administration may dispense with the continuity of power requirements outlined in paragraph 3.h.(10) above for vessels of less than 1600 gross tons.

Encl (3) Sample Multi-Certificated Vessel COI Endorsement

The paragraphs below describe the sample manning and operational endorsements that might be found on the Certificate of Inspection of a vessel authorizing service as both an OSV and one or more cargo and miscellaneous vessel services under 46 CFR Subchapter I. It is not expected that the sample endorsements below represent a comprehensive list of manning and operational COI endorsements. However, this list was developed to provide OCMI's guidance in preparing COI endorsements for multi-certificated vessel operations.

FREIGHT (OR INDUSTRIAL) VESSEL SAMPLE MANNING

For vessels that either have no or some degree of basic automation:

1 MASTER	1 CHIEF ENGINEER
2* LICENSED MATES	2 LICENSED ENGINEERS
2 ABLE SEAMEN	3 OILERS
1 ORDINARY SEAMAN	

For vessels that have automation fully complying with 46 CFR 61.40 and 62.01 through 62.35 and meeting the intent of 62.50-20 for a minimally attended engine room as determined by the Cognizant OCMI:

1 MASTER	1 CHIEF ENGINEER
2* LICENSED MATES	2 LICENSED ENGINEERS
2 ABLE SEAMEN	
1 ORDINARY SEAMAN	

For vessels that have automation fully complying with 46 CFR 61.40 and 62.01 through 62.35 and meeting the intent of 62.50-30 for a periodically unattended engine room as determined by the Cognizant OCMI:

1 MASTER	1 CHIEF ENGINEER**
2* LICENSED MATES	1 LICENSED ENGINEER**
2 ABLE SEAMEN	
1 ORDINARY SEAMAN	

* If vessel is over 1000 GT, must provide 3 Licensed mates for voyages 400 miles or more in length.

** Provided the OCMI has reviewed, accepted and verified the vessel automation. Manning reductions in the engine department will be made only after a system has operated for a sufficient period of time to demonstrate its reliability, as well as the crew's ability to maintain the vessel and perform all required evolutions.

OCEANS

This vessel has been inspected and approved for multi-certificated employment as an offshore supply vessel (OSV), freightship, towing vessel, or industrial vessel, under the provisions of (CG-CVC) Policy Letter **TBD-19**. It must conform at all times to the most stringent design and equipment standards of either Subchapter L, I, M. or SOLAS regardless of the service in which it is engaged. The Master is required to record the type of service in the vessel's logbook when the vessel's service has changed.

The specified manning level is contingent upon the proper operation of the engineering automated control/monitoring systems. Any major alteration or essential component failure must be reported immediately to the cognizant Officer in Charge Marine Inspection (OCMI).

Immersion suits are not required when the vessel is operating in the Atlantic Ocean between 32 degrees north and 32 degrees south latitude or any other waters between 35 degrees north and 35 degrees south latitude.

OFFSHORE SUPPLY VESSEL

The following operating conditions apply while the vessel is operating as an offshore supply vessel (OSV), as defined by 46 U.S.C. 2101(19), and engaged in the support of exploration, exploitations, or production of offshore mineral and oil industry resources.

Vessel is prohibited from discharging noxious liquid substance residue to the sea.

While engaged in support of exploration, exploitation, or production of offshore mineral or energy resources vessel manning may be reduced as follows:

1 MASTER	1 CHIEF ENGINEER
2 LICENSED MATES	
2 ABLE SEAMEN	
1 ORDINARY SEAMAN	

In addition, the vessel may carry **XX** other persons in the crew, **YY** persons in addition to crew, and **ZZ** offshore workers.

When the vessel is operating as an OSV and is on a voyage of less than 600 miles, the manning may be reduced by one (1) licensed mate and one (1) able seaman. Concurrently, **ZZ** offshore workers may be carried.

TOWING VESSEL

When the vessel is operating as a towing vessel the required crew is the same as for an OSV, except the deck officers must also comply with 46 CFR 15.535.

FREIGHT, TOWING OR INDUSTRIAL VESSEL

The following operating conditions apply while operating as a freight, towing, or industrial vessel.

This vessel does not meet the U.S. double hull design standards of 33 CFR 157.10(d) and may not carry oil, as defined by 33 CFR 157.03, in bulk in integral tanks. (If appropriate, a Large OSV likely meets § 157.10(d).)

When operating as a freight, towing, or industrial vessel, the discharge of fuel oil, petroleum-based drilling fluids, or other combustible liquid to a platform, facility, MODU, or another vessel is prohibited.

Encl (4) Comparison Table: 46 CFR Subchapters L, I, and SOLAS

Issue	Topic	Subchapter L	Subchapter I	SOLAS	Comments
NOTE: All red text is changes from original D8 policy text.					
1	Double Hull Requirements (per OPA 90)	OSVs <u>under 500 GRT/6,000 GT</u> (ITC) exempt per 46 USC 3702(b).	Must have double hull for cargo tanks containing OPA cargoes.	No requirements for double hull if considered "other than an oil tanker" with cargo tanks coming under regulation 2(2) of Annex I MARPOL.	Under 500/6,000 text added to update to include CG-CVC ltr 16711 Ser# 431 of 5/23/12
		<u>A Large OSV with bulk liquid cargo, including drilling fluids, containing oil as defined by 33 CFR 157.03, must comply with double hull requirements in 33 CFR 157.10d.</u>			Large OSV explanatory text added to match 46 CFR
2	Bulk Cargo	May discharge bulk liquid cargoes to another vessel.	May not discharge bulk liquid cargoes to another vessel.	Not addressed	
		Unlimited amounts of excess fuel as cargo.	No provisions for excess fuel as cargo except as part of the limited quantities of Grade D & E mentioned below.	Not addressed	
		Grade D and E cargoes limited to 20 % of DWT except may carry Grade D & E drilling fluids without limit (46 CFR 125.110).	May carry limited quantities (20% DWT) as follows (46 CFR 90.05--35): a. Cargo vessels: Grades D/E cargoes in integral tanks. Certain Grade C cargo and Grades D/E cargoes in portable tanks IAW 46 CFR 98.30	Vessels carrying 200m3 or more in oil cargo must meet MARPOL Annex I Regulations 9,10,14,15(1),(2), (3), 18, 20,and 24(4) in addition to normal requirements for cargo vessels.	
		Grade B cargo limited to 20% DWT and may only be carried in fixed independent tanks on deck.	b. Industrial vessels: Grades B & lower cargoes in fixed independent or integral tanks authorized by COMDT.		
		May carry hazardous materials in portable tanks in accordance with 46 CFR 98.30.	Grades D & E and specifically named Grade C cargoes in portable tanks per 46 CFR 98.30		
		May carry NLS per 46 CFR 125.120	NLS not addressed	NLS carriage per MARPOL Annex II	
		<u>For Large OSV see 46 C.F.R. 127.650.</u>			Large OSV explanatory text added to match 46 CFR
3	Primary Lifesaving	100% aggregate required	100% required each side	100% required each side	
		<u>Subchapter L</u>	<u>Subchapter W</u>		
		<u>Large OSV use Subchapter W</u>			Large OSV explanatory text added to match 46 CFR

Issue	Topic	Subchapter L	Subchapter I	SOLAS	Comments
4	Structural Fire Protection	Minimal. See 46 CFR 127.220	46 CFR 92.07 applies if vessel is over 300 GT and carries over 12 industrial personnel.	SOLAS CH II-2 Part C applies. NVIC 10-99 (Interpretations of SOLAS II-2) should be consulted for recent interpretations of SOLAS fire protection requirements.	
		Large OSV use SOLAS CH II-2			Large OSV explanatory text added to match 46 CFR
5	Fire Protection	Fixed gaseous systems required for paint lockers only (with exceptions for size and location); no requirements for spaces containing internal combustion engines.	No exceptions for paint lockers. If vessel >1000 GT, spaces containing internal combustion engines must have fixed gaseous systems.	Spaces containing internal combustion engines required to have fixed system plus set of portable air-foam equipment.	
		Only 1 fire pump required. A Large OSV requires 2 fire pumps, each capable of delivering water simultaneously from the two highest outlets at a pitot tube pressure of approximately 75 p.s.i.	Only 1 fire pump required if under 1,000 gross tons.	2 Fire pumps required with sufficient fire main diameter to convey max required discharge from both fire pumps operating simultaneously or 616 GPM.	Large OSV explanatory text added to match 46 CFR
		1-1/2 inch hoses at all interior and exterior fire hydrants.	1-1/2 inch hoses for interior spaces, 2-1/2 inch hoses for exterior hydrants. ⁽¹⁾	No diameter hose specified as long as output/ performance satisfied.	
		Halon 1211, 1301 and mixtures for BI, BII, CI, CII portable extinguishers	Halon not allowed for portable fire extinguishers	Halon allowed only in machinery spaces, pump rooms, vehicle (cargo) spaces.	Current Sub L does not seem to address Halon except in § 132.350.
				NVIC 10-99 (Interpretations of SOLAS II-2) should be consulted for recent interpretations of SOLAS fire protection requirements	
		⁽¹⁾ Exterior stations may be outfitted with siamese 1 1/2 inch hoses as long as pump capacity and performance is based on 2 1/2 inch outlet.			
6	Fire Detection	Required for unattended machinery spaces.	Required in machinery spaces designed to be minimally attended and periodically unattended.	Required for unattended machinery spaces and in accommodation spaces and/or escape routes contingent upon the method of SFP.	

Issue	Topic	Subchapter L	Subchapter I	SOLAS	Comments
7	Electrical	For OSVs 19.8m (65 ft) or less in length, the Alternative Standards listed in 46 C.F.R. 129.120 are acceptable.	Must meet Sub J	In general, vessel meeting Sub I and Sub J, meets SOLAS with the exception of Fire Detection (see above).	
		NOTE: Compliance w/Sub J is required for items not specifically addressed in Sub. L. The following compares differences in the items specifically addressed in Sub L. A Large OSV must meet Sub J.			
	Power Sources	* Vital systems identified in 46 CFR 128.130(a) and loads identified in 46 CFR 129.310(a)(1) (ii) -(v) must be arranged so that they can be energized from 2 sources of electricity. (e.g. a generator, or an alternator driven by a propulsion engine, in combination with a battery having sufficient capacity to supply the loads above for 3 hours, is an acceptable 2 source system).	Normal: Each ship service generator required to have sufficient capacity to supply vsI's service loads (defined in 46 CFR 111.10-1)	Normal: Same as I	
		* Vessel 100 GT and over must have 2 power generating sets, one of which may be propulsion driven.			
		Emergency: Source not required. Vessels < 100 GT must have emergency lighting along line of escape to the main deck from accommodations or working (machinery) spaces below main deck.	Emergency: Source required, for emergency loads in 46 C.F.R. 112.15.5 and capacity sufficient for period of operation in Table 46 CFR 112.05-5(a).	Emergency: Self contained emergency power source required with period of operation dependent on loads required. (See SOLAS Chap II-1, Regulation 43.)	
	Cabling	UL listed cable allowed	Use of boat cable not addressed	Flame retardant; no specific requirements	
Steering gear	Orbitrol system allowed although not considered a full follow-up control system. Credit given to vessels with multiple- screw propulsion if capable of steering vessel.	Power driven main steering gear must have full follow-up control of the rudder.	Main steering gear must provide rudder rate of 28 secs from 35 to 30 degrees of rudder movement, may use all power units to get max rate.		
8	Stability	Intact: See 46 CFR 170.170 (weather) and 46 CFR 170.173 or 46 CFR 174.185(b)-(e).	Intact: See 46 CFR 170.170 (weather) and 46 CFR 170.173.	Intact (same as CFR).	
		Damage: See 46 CFR 174.200 and 174.205 if carrying more than 16 offshore workers.	Damage (none required).	Damage: SOLAS Chap II-1, Part B-1, applies if vessel >300 ft.	
		Large OSV use SOLAS.			Large OSV explanatory text to match 46 CFR

Issue	Topic	Subchapter L	Subchapter I	SOLAS	Comments
9	Automation: QFA / DVTP	Only required if unattended machinery space.	Required regardless of manning.	Not required.	
	Propulsion Controls	Failsafe state defined as "no increase in speed or thrust" must result when the remote prop control system fails. This allows complete engine shutdown if a failure of the remote prop control system occurs	Failsafe state defined as "speed and direction of thrust must remain as-is" upon failure of remote prop control system, until alternate means of control is established. Only partial reduction in prop capability is allowed, as long as 7 knots or half design speed can be maintained.	Same as I	
	Engine Order Telegraph	Not required	Required	Same as I	
	Independence	Independence of propulsion control, alarm and monitoring, and safety control systems not required.	Independence required. Single non-concurrent failures of major components within each system must not prevent sustained or restored operation of that system.	Independence not specifically addressed	
	Required Alarms & Monitoring	Minimal for diesel engines	Adopts ABS tabulated list	No tabulated list	
	Powering	Alarms not required to be continuously powered, but 2nd (emergency) power source required	Alarms required to be continuously powered, and 2nd (emergency) power source required	Same as I	
	Unattended Machinery Spaces	No ECC required	ECC required	Same as I	
		No fire control station	Fire control station required	Same as I	
		No Ass't-Needed alarm	Ass't-Needed alarm required	No Ass't-Needed alarm	
		No dead-man's alarm	Dead-man's alarm required	Same as I	
No sea valve control		Sea valve control required	Same as I		
No continuity of electrical power requirement		Continuity of electrical power requirement	Same as I		
Alarms extend to pilothouse		Alarms extend to pilothouse, ECC, & engineers' accommodations	Same as I		
Redundant vital auxiliaries not required	Auto transfer of redundant auxiliaries	Same as I			
10	User Fee	\$1470/year, \$1260/year if vessel enrolled in alternate compliance program	\$1870/year	N/A	Fixed typographical error

Issue	Topic	Subchapter L	Subchapter I	SOLAS	Comments
11	Manning	2 watch system using 1 mate, 1 master for voyages less than 600 miles. Voyages over 600 miles must have 2 mates plus master 46 USC 8301(b).	3 watch system. Requires 3 mates if vessel over 1,000 GT. On voyage less than 400 miles may reduce to 2 mates 46 USC 8301(a)(2).	Subject to Administration and STCW (same as I or L).	
12	Hospital Space	None	Required by 92.20-35 if vessel makes voyages more than 3 days and carries 12 or more crew	Silent	
13	Keel coolers	Allows attachment to hull using fillet welds per 46 CFR 128.420	Attachment to hull must use full penetration welds per 46 CFR 56.50-96.	Silent	
14	Stateroom Capacity and Size	For vessels >100GT: Max 4 persons/room for crew members @30 square feet/person; Max 6 persons/room for offshore workers @ 20 square feet/person (46 CFR 127.280)	Max 4 persons/room for crew members @ 30 square feet/person. Where practicable, each licensed officer must be provided with a separate stateroom (46 CFR 92.20-20).	Not addressed; ILO has standards similar to 46 CFR: ILO 1970 (C133) Art 5.2.a: For ratings: Vessels 1000 GT - 3000 GT: 30 square feet/person; 3000 GT - 10,000 GT: 35 square feet/person. Max 2 persons per room. ILO 1949 (C92) Art. 10.4 Vessels < 800 GT: 20 square feet/person; 800 GT - <3000 GT: 25 square feet/person	
				3000 GT and up 30 square feet/person; 1 officer per room if in charge of navigation or engineering watch; Other officers may be 2/room. Ratings may be 4/room. <i>Also see Maritime Labor Convention, 2006 and NVIC 02-13.</i>	
15	Maneuvering Characteristics Fact Sheet	Only required for a Large OSV, same as Sub I requirement.	Required for vessel 1,600 gross tons or over.	IMO Resolution A.601(15).	New text added for clarity

**APPENDIX B PROPOSED POLICY LETTER – TEMPORARY EMERGENCY
BERTHING VESSELS**

Subj: Temporary Emergency Berthing Vessels

- Ref: (a) 46 U.S. Code § 2101(5)(a)
(b) 46 CFR 15 – Manning Requirements
(c) 46 CFR Subchapter C – Uninspected Vessels

- 1) **Purpose:** To provide all OCMI's guidance when determining suitability of vessels to be used as Temporary Emergency Berthing Vessels for response personnel following natural and man-made disasters. This policy is not intended for berthing displaced citizens aboard temporary emergency berthing vessels.
- 2) **Background:** Regional disasters, natural and man-made, often create a need for vessels to serve as temporary emergency berthing to support response personnel during recovery efforts. These guidelines are provided in order to promote a satisfactory level of safety for personnel berthed on temporary emergency berthing vessels. OCMI's are encouraged to apply these guidelines when a vessel will be used and consideration is received for the berthing of individuals on board¹. This policy shall only be used when disaster response and recovery efforts create accommodation shortages for response personnel, or when responder proximity to the response or recovery site is desirable for effective operations.
- 3) **Vessel Action:** Each vessel owner or representative submitting their vessel for consideration as a temporary emergency berthing vessel shall contact the cognizant U.S. Coast Guard Officer in Charge, Marine Inspection (OCMI) and submit an application for examination. The types of application for examination are detailed as follows:
 - a) U.S. flagged vessels with a current COI, including Subchapter T, K, and H vessels, shall submit a completed Coast Guard form CG-950, Application for Excursion Permit.
 - b) U.S. flagged vessels with a current COI, including Subchapter I and L vessels, shall submit a completed Coast Guard form CG-3752, Application for Inspection of U.S. Vessel.
 - c) Domestic uninspected commercial vessels, or U.S. flagged vessels with expired COI's, shall submit a completed Coast Guard form CG-3752, Application for Inspection of U.S. Vessel.
 - d) Each application for examination will address the following items:
 1. Physical location of the berthing accommodations aboard the vessel and securing arrangements
 2. Physical location of vessel and mooring arrangements
 3. Means of escape from accommodation spaces and vessel
 4. Lifesaving arrangements
 5. Firefighting arrangements
 6. Electrical and piping arrangements
 7. Sanitary arrangements
 8. Galley/Cooking arrangements

¹ In accordance with reference (a), consideration means an economic benefit, inducement, right, or profit including pecuniary payment accruing to an individual, person, or entity, but not including a voluntary sharing of the actual expenses of the voyage, by monetary contribution or donation of fuel, food, beverage, or other supplies.

- 4) **OCMI Approval:** Once the OCMI receives the completed application, a marine inspector will conduct an on-site safety verification examination. If the vessel satisfactorily passes the examination, the OCMI will either issue Coast Guard Form CG-949, Permission to Carry Excursion Party to certificated Subchapter T, K, and H vessels; an amended COI for Subchapter I and L vessels; or a letter of approval (LOA) to uninspected commercial vessels for 60 days. If the vessel owner or representative applies for an extension, a reexamination may be required after 60 days in order to verify the condition of the vessel. A copy of the excursion permit, amended COI, or LOA must be posted near the vessel accesses at all times.
- 5) **Guidelines:**
- a) **Manning Standards.** In accordance with manning requirements prescribed in reference (b), the OCMI will consider requests to reduce required manning standards to allow for berthing of additional personnel on a case-by-case basis. As the vessel is safely in port and not in navigation, these requests should be favorably considered, particularly the replacement of credentialed mariners by watchmen or stewards department personnel. Reduction in engineers should be considered when the vessel is on shore utilities.
 - b) **Priority of OCMI Effort.** If the OCMI staff is insufficient to respond to all requests for inspection and certification under this policy, then the priority listed in the following paragraphs shall be followed. Only if the federal or state-level emergency management agency requires vessel characteristics only available in a lower priority category or all higher priority vessels have been certificated shall the OCMI's staff certificate a lower priority vessel under this policy.
 - c) **U.S. Vessels with valid COIs (First Priority).** For U.S. flagged vessels that hold a valid COI which authorizes passengers or the carriage of persons in addition to the crew, there is no additional authorization required to berth personnel up to the number of persons permitted on the COI.
 - d) **U.S. Vessels with expired COIs (Second Priority).** For U.S. flagged vessels previously certificated to carry passengers or persons in addition to the crew, the following systems and equipment must be installed and in working order in accordance with regulations applicable to the vessel's type and service, and be verified by the OCMI prior to authorizing personnel berthing up to the same number of persons permitted on the most recent COI:
 1. Fire protection equipment (fixed and portable)
 2. Lifesaving equipment
 3. Means of escape from accommodation areas to the dock
 4. Passenger accommodations
 5. Pollution prevention (including sanitary system)
 6. Gangway arrangements
 7. Dock lighting and escape arrangements
 8. Vessel security
 9. Machinery intended for use while passengers are embarked
 - e) **Domestic Uninspected Vessels (Lowest Priority).** All uninspected vessels, as defined by 46 CFR 24.10-1, shall meet all applicable sections of reference (c). In addition, all uninspected vessels must meet the following items to the satisfaction of applicable rules/requirements. This list includes specific provisions of Subchapter T; however, based on vessel type, size and total number of response personnel being accommodated, additional items from other subchapters may be required based on the individual circumstances found during inspection. Subchapter H cites provided within parenthesis.
 1. **Mooring.** In accordance with 46 CFR 184.300 (46 CFR 77.07-5), each vessel shall be fitted with ground tackle and mooring lines necessary for the vessel to be safely moored to a shore

- side facility. Each temporary emergency berthing vessel is prohibited from getting underway with passengers. Vessels shall not be anchored.
2. Navigation Safety. In accordance with Navigation Rules, International – Inland, COMDTINST M16672.2(series), each vessel shall display lighting applicable to the vessel's type and operation.
 3. Space requirements. In accordance with 46 CFR 177.800 and 46 CFR 177.810 (46 CFR 72.20), all passenger accommodations must be arranged and equipped to provide for the safety of the passenger. Additionally, a minimum of 30 square feet should be provided for each person berthed on the vessel.
 4. Means of Escape. In accordance with 46 CFR 177.500 (46 CFR 72.10-5), there shall be at least two safe, clear, and protected means of escape provided from any berthing area or accommodation areas to a shore side location clear of potential fire and flooding events.
 5. Manned watch. In accordance with 46 CFR 185.410 and 46 CFR 185.420 (46 CFR 78.30-15), day and night watch personnel shall be trained in and demonstrate the skills necessary to recognize and address potential emergent situations (i.e. fire, flooding, security, etc.). The uniform of these watch personnel shall be conspicuously different from other persons so as to be readily distinguished. The watch personnel shall have in their possession at all times a means to communicate with personnel ashore (and or standby vessels).
 6. General Alarm. In accordance with 46 CFR 183.550 (46 CFR 77.05-1), each vessel must have a way to clearly alert all personnel onboard in a timely manner.
 7. Communications Plan. In accordance with 46 CFR 185.510, each vessel shall have a communications plan which addresses appropriate port personnel and local fire/emergency service contacts in case of an emergency. The watch personnel shall have a means to be able to contact these emergency contacts at all times.
 8. Fire safety. In accordance with 46 CFR 181.400(c) (46 CFR 76.05-1), all accommodation spaces shall have an installed and operational smoke detector or a smoke actuated fire detecting unit.
 9. Generators and flammable materials. In accordance with 46 CFR 177.405(c), generators and any spark producing device should be located as far away as practicable from accommodation spaces, especially ventilation intakes. Other flammable materials, such as fuel for portable cooking equipment shall be safely stored as far away as practicable from accommodation spaces and running machinery. In accordance with 46 CFR 181.500(c), A B-V type semi-portable fire extinguisher shall be required where there is no fire pump on the temporary emergency berthing vessel.
 10. Hazardous Ships' Stores. In accordance with 46 CFR 147, all hazardous materials intended for stowage as ships' stores shall meet requirements for the labeling, stowage, and use of those materials.
 11. Galleys/Cooking equipment. Galleys, if equipped, must meet the requirements of 46 CFR 72.05-50(h) and 46 CFR 181.500(a) (46 CFR 76.50-10). Portable cooking equipment (i.e., propane grills, camp stoves, etc.) shall be located as far as practicable from berthing locations. Deep fat fryers shall be fitted with a grease extraction hood and a chemical fire extinguishing system that meets NFPA 17 / 17a (see 46 CFR 181.400(d), 181.425). The immediate vicinity of a deep fat fryer shall be kept free of combustible materials (cloth or paper towels, cardboard, etc.).
 12. Firefighting. In accordance with 46 CFR 181.500(a) (46 CFR 76.50-10), there shall be at least one Coast Guard approved portable fire extinguisher for each accommodation/berthing space onboard the vessel and additional fire protection around each generator and fuel tank.

13. Lifesaving. In accordance with 46 CFR 180.70 and 46 CFR 180.71 (46 CFR 77.06- 1), each vessel shall provide a Coast Guard approved life preserver with light and whistle for each person carried and ring buoys as outlined below.
 - a. Life preservers shall be properly distributed throughout the berthing spaces for each person. Work vests are not considered approved life preservers.
 - b. Ring buoys shall be evenly distributed throughout the weather deck. Vessels under 196 feet in length must carry at least four (04) life buoys, two (02) of which must have lines and self-igniting lights attached. Vessels over 196 feet in length must carry at least eight (08) life buoys, four (04) of which must have lines and self-igniting lights attached.
 14. Grey and Black Water pollution prevention. Zero discharge of grey or black water is authorized without a state permit. All vessels must maintain a grey/black water pollution prevention plan and in accordance with 33 CFR 159, be equipped to handle, store and properly dispose of any sewage and refuse that is collected on board.
 15. Stability. In accordance with 46 CFR 178.310 (46 CFR 72.30-1), due consideration should be given to loss of stability due to topside loading. A letter from a professional naval architect or marine engineer attesting to the stability of the vessel may be required prior to use of the vessel for temporary emergency berthing.
 16. Handrails. In accordance with 46 CFR 177.900 (46 CFR 72.40), all vessels shall have guard rails, bulwarks, or some other fall prevention measures installed on all weather decks and gangways.
 17. Safety Orientation. In accordance with 46 CFR 185.506, all personnel on board are required to receive a safety orientation of the vessel within 24 hours of reporting aboard, including means of notifying the manned watch in case of an emergency, knowledge of activating the general alarms, location of life saving appliances, and knowledge of egress routes.
- f) Inspected Vessels which want to increase the total number of persons allowed in addition to the crew. All inspected vessels that intend to install additional berthing spaces on the vessels, must meet the following items to the satisfaction of applicable rules/requirements.
1. Portable Accommodation Modules (PAM). All PAMs shall be installed and examined in accordance with CG-ENG Policy Letter No. 01-16 – Portable Accommodation Module Guidance (Enclosure (2)).

**APPENDIX C PROPOSED POLICY LETTER – CREDENTIALING OF
SEAFARERS DURING EMERGENCY / DISASTER RESPONSE OPERATIONS
SUPPORTING THE U.S. AND ITS TERRITORIAL ISLANDS**

Subj: Credentialing of Seafarers during Emergency / Disaster Response Operations Supporting the U.S. and its Territorial Islands

- 1) **Purpose:** This policy letter provides guidance for the minimal acceptable credentialing of seafarers working on vessels supporting response, restoration, and recovery activities. This letter applies to those activities occurring between U.S. ports and between the U.S. and its territories that are otherwise considered to be international voyages as defined by U.S. law. This policy letter provides the guidelines to be used by Sector Commanders and Officers in Charge, Marine Inspection (OCMI) when considering requests for vessels to participate in this type of relief effort.
- 2) **Action:** The U.S. Coast Guard will use this policy as a guide for determining appropriate manning of vessels providing response, restoration, and recovery activities to the U.S. and its territorial islands.
- 3) **Background:**
 - a) Currently, the United States has sixteen territories, five of which are permanently inhabited: Puerto Rico, Guam, Northern Mariana Islands, United States Virgin Islands and American Samoa. Only Puerto Rico and U.S. Virgin Islands are close to the Continental/Contiguous United States (CONUS) and each other. While Guam and Northern Mariana Islands are close to each other. Both 46 CFR Subchapters D and I define voyages to, from, or between these territorial islands as international voyages, despite the SOLAS international voyage definition to the contrary.
 - b) United States law requires that seagoing vessels be operated by individuals having the appropriate officer endorsement authorizing service in the capacity in which the individual is employed¹. 46 CFR 6.01 allows the Coast Guard to Waive compliance with navigation and inspection laws, which include but are not limited to, manning requirements related to vessel crewing, watchstanding and mariner credentialing.
 - c) 46 CFR 15.401 requires that companies may employ individuals holding credentials appropriate for the service within the restriction of the credential.
 - d) 46 CFR 15.501 provides for the OCMI to determine for a particular vessel the appropriate manning dependent upon laws, regulations, and such factors as: emergency situations, size and type of vessel, installed equipment, frequency of port calls.
 - e) Policy letter (TBD) establishes that the OCMI may issue waivers to the COI manning requirements on a case-by-case basis consistent with existing policy.
- 4) **Discussion:**
 - a) United States deck officers holding a near coastal route on their officer endorsement meet the same requirements to obtain the oceans endorsement, only lacking assessment in use of celestial navigation equipment and tables.
 - b) 46 CFR 15.405 requires each credentialed crewmember to become familiar with the relevant characteristics of the vessels appropriate to his or her duties and responsibilities. It is important that the Coast Guard ensure that those operating vessels in emergency situations are familiar with the vessel upon which they are operating. Requiring a change of vessel crew for response, restoration, and/or recovery activities (herein, *disaster response*) to the U.S. non-contiguous states or island territories, would delay any needed response to the disaster and the ability to use that particular vessel.

¹ See generally 46 USC Chapters 71 and 83. This includes an endorsement containing the appropriate route. Endorsements with a near coastal route authorize service on ocean waters within 200 miles of the U.S. and its possessions. See 46 CFR 10.107(b). Typically, a voyage between the continental United States and territorial islands would require an officer to hold an endorsement authorizing service on *ocean* routes.

- c) Vessels approved to support the disaster response efforts should be operated by mariners most familiar with those specific vessels (or the same types of vessels), including knowledge of safety and firefighting equipment, vessel handling characteristics, and navigational abilities, despite such individuals possibly holding credentials limited to near coastal service.

5) **Guidance:**

- a) The cognizant OCMI may allow vessel owners or operators to use merchant officers holding near coastal endorsements, where these officers hold both the national and STCW endorsements. These officers should be those who regularly crew the vessel, or have fulfilled the same duties on similar vessels.
 - b) Use of merchant officers holding near coastal endorsements on board these vessels should be annotated on the vessel's Certificate of Inspection specifically allowing officers holding endorsements for near coastal routes to serve on the vessel in the disaster relief efforts to the U.S. non-contiguous states and territorial islands.
 - c) The cognizant OCMI may allow the use of mariners holding officer endorsements, limited to offshore supply vessels, only in support of response, restoration, and/or recovery efforts where the offshore supply vessel is approved for this limited purpose.
 - d) This policy is designed for, but not limited to disaster response voyages between ports in the United States, the U.S. and its territories, or between U.S. territories. Such voyages, when reasonably possible, should minimize the vessel's distance from shore beyond 200 Nautical miles. Transits into ports of other countries is not authorized under this suspension of the manning rules, unless deemed operationally necessary or otherwise excepted by the cognizant OCMI. Similar consideration could be made for a vessel certificated or crewed for inland operations if needed to sail from the Intracoastal Waterway to a CONUS island such as the Florida Keys or barrier islands.
- 6) Nothing in this policy limits the OCMI from authorizing any additional support functions (within the scope of the OSV's industrial mission and existing certifications) when the circumstances of a specific emergency dictate the need for additional resources.
- 7) Disclaimer. While the guidance contained in this document may assist the industry, public, Coast Guard, and other Federal and State regulators in applying statutory and regulatory requirements, the guidance is not a substitute for applicable legal requirements nor is it a regulation itself.

**APPENDIX D PROPOSED POLICY LETTER – GUIDANCE ON DISASTER
RELIEF VESSELS RESPONSE POSTURE AND EFFORTS TO SUPPORT U.S.
TERRITORIAL ISLANDS**

Subj: Guidance on Disaster Relief Vessels Response Posture and Efforts to Support United States Territorial Islands

Ref: (a) 46 Code of Federal Regulations (CFR) 90.05-10
(b) Policy Letter **TBD**, Temporary Emergency Berthing Vessels, dated
(c) Policy Letter **TBD**, Response, Restoration, and Recovery Vessels (TRV), dated

- 1) **Purpose:** The 2017 hurricane season was a historic year for weather phenomena and vessels across the nation offered to participate in relief efforts to the affected regions. Current policy makes it unclear or difficult for some otherwise capable vessels to participate in these efforts. This Policy Letter provides guidelines to be used by District Commanders, Sector Commanders, and Officers in Charge of Marine Inspection (OCMI) when considering requests for vessels to participate in a future disaster relief effort. This guidance also provides the criteria that U.S. Coast Guard certificated vessels are expected to meet to participate in relief efforts in U.S. Territorial Islands. This policy letter will not expire until cancelled by further guidance or regulations.
- 2) **Discussion:**
 - a) Currently, the United States has sixteen territories, five of which are permanently inhabited: Puerto Rico, Guam, Northern Mariana Islands, United States Virgin Islands and American Samoa. Only Puerto Rico and U.S. Virgin Islands are close to the Continental/Contiguous States (CONUS) and each other. Guam and Northern Mariana Islands are close to each other. Both 46 C.F.R. Subchapters D and I define voyages to, from, or between these territorial islands as international voyages.
- 3) **Action:** For the purposes of disaster response operations by U.S.-flag vessels, the following guidelines have been established:
 - a) Policy Letter **TBD** – Response, Restoration, and Recovery (TRV) outlines the means by which an OSV may attain the appropriate endorsement allowing it to respond to officially declared disasters. Vessels designated as Response, Restoration, and/or Recovery Vessels (TRV) – per MSC-provided letters and COI endorsements – may be engaged to provide necessary services based on need, following an officially declared emergency and/or FEMA request for support.
 - b) Certificated Multi-Service Vessels and OSVs that qualify as Standby Vessels (as defined within 33 CFR, Subchapter N, Subpart E) are automatically qualified to receive an appropriate TRV endorsement commensurate with each vessel’s size, range, and capabilities. These vessels are therefore pre-qualified to respond to officially declared disasters in the appropriately assessed capacities.
 - c) All other vessels – requiring COI exemptions or equivalency determinations to support disaster relief efforts – will require preapproval to provide disaster response support. Vessel owners and operators should submit these requests to **(insert appropriate contact information)**. An email with an attached letter is acceptable. The impacted OCMI will coordinate any required inspection activities with the appropriate OCMI in advance of the transit.
 - d) SOLAS Exemptions: Per ref (a), those vessels that do not have SOLAS certificates must request and obtain a SOLAS exemption from CG-CVC in order to transit to or between territorial islands. A SOLAS exemption authorizes a vessel to make a single voyage without the appropriate international certificates. This exemption may be reissued if response efforts would be assisted by doing so. It does not exempt nor authorize the vessel to conduct any other types of operations outside the scope of their COI. A COI exemption request is to be submitted in writing to **(insert appropriate contact information)**. An email with an attached letter is acceptable.
 - e) Subchapter I vessels with valid SOLAS certificates do not require additional Coast Guard approval to participate in relief efforts.

- f) Dual Certificated vessels (under Subchapters I and L) with valid SOLAS certificates do not require a Coast Guard exemption to participate in relief efforts. Those without SOLAS certificates may request a SOLAS exemption in accordance with the procedures in paragraph 3.a of this policy.
 - g) Subchapter L vessels and existing OSVs inspected under Subchapter I: 46 U.S.C. 2101 (19) allows Offshore Supply Vessels (OSV) to, "carry goods, supplies, individuals in addition to the crew, or equipment in support of exploration, exploitation, or production of offshore mineral or energy resources." OSVs that are not dual certificated (Subchapters I and L) are not automatically authorized to participate in disaster relief efforts as that is not within the scope of their normally approved operations. However, these requests can be considered, especially if Subchapter I vessels are not reasonably available or properly equipped with cranes, sidescan sonar, or remotely operated vehicles (ROVs) to assist in harbor survey/salvage or otherwise to respond to the disaster. These requests should be submitted utilizing the same process outlined in paragraph 2 of this policy.
 - h) Hazardous Material Cargo: Vessels may carry hazardous cargoes only as permitted by the vessel's COI. Waivers will not be granted to carry hazardous cargoes outside what is authorized by the vessel's COL
 - i) Manning: Vessels are to be manned with appropriately licensed personnel as required by their COI. OCMI's may issue waivers to the COI manning requirements on a case-by- case basis consistent with existing policy.
 - j) Berthing Vessels: Vessels operating outside the scope of their COI as a temporary emergency berthing vessel for disaster response personnel must follow **Policy Letter TBD** to be certificated for this service. In the event that temporary berthing for local residents in the disaster area are requested by the disaster emergency management team, vessels certificated under Subchapter H or T should be used, if available.
 - k) Advanced Notice of Arrival (ANOVA) notifications shall be made prior to arrival in accordance with 33 CFR 160 Subpart C.
- 4) **Environmental Aspect and Impact Considerations**: Environmental considerations were examined in the development of this Instruction and have been determined to be not applicable.
- 5) **Disclaimer**: This policy letter guidance is neither a substitute for applicable legal requirements, nor a rule. It is not intended nor does it impose legally-binding requirements on any party. It represents the Coast Guard's current thinking on this topic and may assist industry, mariners, the general public, and the Coast Guard, as well as other Federal and state regulators, in applying statutory and regulatory requirements. An alternative approach may be used for complying with these requirements if the approach satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative approach (you are not required to do so), you may contact the Coast Guard Office of Commercial Vessel Compliance (CG-CVC) who is responsible for implementing this guidance.

**APPENDIX E PROPOSED POLICY LETTER – ENDORSEMENT OF
OFFSHORE SUPPLY VESSELS (OSV) AS RESPONSE, RESTORATION, AND
RECOVERY VESSELS (TRV)**

Subj: Endorsement of Offshore Supply Vessels (OSV) as Response, Restoration, and Recovery Vessels (TRV)

Ref: (a) Policy Letter **TBD**, Temporary Emergency Berthing Vessels, dated
(b) Policy Letter **TBD**, Guidance on Disaster Relief Vessels Response Posture and Efforts to Support United States Territorial Islands, dated

- 1) **Purpose:** This policy provides guidance for the Marine Safety Center (MSC) on issuing TRV letters and, subsequently, for Officers in Charge, Marine Inspection (OCMI) on endorsing the Certificate of Inspection based on the TRV letters (as issued by the MSC) for an Offshore Supply Vessel as a Response, Restoration, and Recovery Vessel.
- 2) **Action:** OCMI's and their designated representatives shall bring this policy to the attention of appropriate individuals in the marine industry and CG inspectors, and use these guidelines in endorsing an OSV with the appropriately assessed TRV (1, 2, or 3) endorsement(s).
- 3) **Background:**
 - a) The U.S. Coast Guard promulgated CVC Policy Letter 17-06 (CH-1), which expired January 2018, to temporarily address specific relief vessel requirements. This policy letter was predicated on the legal ability for a vessel to be endorsed for multi-service on the COI. The Eighth Coast Guard District (D8) Policy letter 09-2001 (dated 05 July 2001) entitled *Certification of Multi-Service Offshore Supply Vessels (OSV)* provides guidance and a gap analysis for those vessels that wish to operate under different services and has been held as the standard for the industry.
 - b) The 2017 hurricane season produced several significant weather events which made landfall in the United States of America and its territories. Because of these storms and the significant damage that resulted, several Offshore Supply Vessel (OSV) owners and/or operators sought emergency approvals from the Coast Guard to deviate from the services identified on the vessel's Certificate of Inspection (COI) in an effort to assist with restoration and recovery operations. Due to an assortment of circumstances, this volunteer effort encountered a variety of challenges. The Coast Guard recognizes the diversity of commercial activities that these and other vessels working in the offshore industry are capable of engaging in and want to work with owner and/or operators to facilitate this.
- 4) **Discussion:**
 - a) During an officially declared disaster, a variety of available U.S. flag vessels certificated under Subchapters I, T, and L (and/or other Subchapters as appropriate based on Section 4(d), above) will provide an organic surge capacity to address the broad set of possible disaster needs and logistic response requirements without reliance on non-U.S. companies or vessels.
 - b) A supplemental Response, Restoration, and Recovery (TRV) COI endorsement will allow for the efficient use of capable, but nontraditional U.S.-flag vessels in a demonstrable, proactive approach to disaster relief activities supporting the nation's citizens and interests.
 - c) The fleet of TRV endorsed vessels will further allow for streamlined logistics including the loading/offloading of vessels at regional port in or near any affected region within the U.S. or its territories minimizing congestion on existing inland infrastructure.
 - d) A wider selection of TRV endorsed vessels will decrease the likelihood of having to redirect assets from commercial contracts, thereby minimizing disruptions to scheduled commercial activities and services both in the disaster area and elsewhere in the country.
 - e) The availability of TRV endorsed vessels may allow for a more rapid or even instant response to a disaster in contrast to the current uncertain and lengthy appeal or waiver process these vessels would otherwise require. The TRV endorsement process eliminates these delays and satisfies any safety or capability concerns.

- f) Combined with the available multi-certificated U.S. flag vessels, TRV endorsed U.S. flag vessels can be utilized without the possible delays resulting from the Jones Act waiver process or the logistics involved in mobilizing overseas assets.

5) **Guidelines:**

- a) Vessels designated as Response, Restoration, and/or Recovery Vessels (TRV) – per MSC-provided letters and COI endorsements – may be engaged to provide those services based on need, following an officially declared emergency and/or FEMA request for support only after Multi-Certificated vessels have been shown to be unavailable through the Right of First Refusal process.
- b) Assessments and approved TRV endorsements may be applied to OSVs (under Subchapter I or T), Liftboats (under Subchapter T or L), and Crewboats (under Subchapter T).
- c) For all other vessels certified under other Subchapters of the CFR, a TRV endorsement will be considered based on specific assessments deemed appropriate for the vessel type by the cognizant OCMI and within the applicable Subchapter rules and requirements. However, the policies applicable to the TRV categories as outlined within this Policy Letter will remain valid (see Sections 5(a, b, & c) and 6, below).
- d) If required in response to an emergency, maritime assets are legally and ethically obligated to answer requests for emergency assistance. Any additional TRV endorsement assigned to a vessel is not intended to relieve any parties, including non-TRV endorsed vessels from any such duties. Rather, it is the intent of any such effort to support the safe and efficient response to citizens and/or parties in need over and above immediate emergency response requirements.

6) **Policy:**

- a) Offshore supply vessels certificated under 46 CFR Subchapter I, T, and/or L may submit requests to the MSC pursuing a COI endorsement as a Response, Restoration, and Recovery Vessel (TRV). The Marine Safety Center will assess the risks associated with the request and with the vessel's capabilities for the categories of TRV service listed below. The MSC will issue a letter listing the approved capabilities (e.g., passengers, cargo, fuel transfer, etc.) for the categories of TRV service. If the vessel meets the criteria specified herein and is issued a TRV letter from the MSC, the Cognizant OCMI is to endorse the vessel's COI stating:

- i) *This vessel may be operated as a TRV for response, restoration, and recovery efforts during and after designated state and federal emergencies or at any time its capabilities are deemed necessary for the support of such activities by applicable state or federal agencies.*
- ii) *Vessel may be operated per its designated qualified level of operation as specified within its COI according to the following categories:*

TRV 1 – Response – Activities related to the immediately critical reaction to any natural or manmade disaster or emergency including activities involving lifesaving, or environmental, structural, or infrastructure damage mitigation. (Typically, 0-7 days following a declared disaster.)

TRV 2 – Restoration – Activities pertaining to the reestablishment of services critical to basic humanitarian, infrastructure, and operational needs in the immediate aftermath of a disaster. (Typically, 1-4 weeks following a declared disaster.)

TRV 3 – Recovery – Sustained activities related to supporting the long-term needs of an affected region or group. (Typically, 1-6 months following a declared disaster.)

- b) Each asset carrying an existing endorsement as TRV 3 or TRV 2 will be considered qualified for activities of any lower endorsement(s), if properly equipped and manned. However, TRV 1 or TRV 2 may be upgraded to a higher endorsement(s) only following reassessment.
- c) If appropriately assessed, part of the TRV endorsement may include approval for the transport of response personnel to/from disaster locations and the berthing of same during transit and after

arrival on location. Additional guidelines for these activities are found, respectively, in Policy Letter TBD – Temporary Personnel Transport Vessels (see Appendix F), and Policy Letter 01-2017 – Temporary Emergency Berthing Vessels.

- d) Fuel oil transfer operations (shoreside or to near-shore vessels or facilities) are considered a logistical need during disaster response operations. While this service is normally reserved for tank vessels complying with 46 CFR Subchapter D, TRVs adequately equipped and assessed to be able to perform these activities as part of their offshore industrial mission will be exempt from the requirements of 46 CFR Subchapter D for the duration of the need for this service or for the length of time which their respective TRV endorsement is considered valid, whichever is shorter.
 - e) Additionally, this endorsement will have no impact or limitation on an existing oil spill recovery notation from a classification society authorized to issue international certificates on behalf of the Coast Guard and authorized and/or endorsed by the cognizant OCMI. For requirements and guidelines surrounding Oils Spill Response Vessels (OSRV), refer to MVI Policy Ltr No. 1-95 – Oil Spill Response Vessels (OSRVs), issued February 13, 1995.
- 6) Nothing in this policy limits the OCMI from authorizing any additional support functions (within the scope of the OSV's industrial mission and existing certifications) when the circumstances of a specific emergency dictate the need for additional resources.

**APPENDIX F PROPOSED POLICY LETTER – TEMPORARY PERSONNEL
TRANSPORT VESSELS**

Subj: Temporary Personnel Transport Vessels

- Ref: (a) Policy Letter **TBD**, Endorsement of Offshore Supply Vessels (OSV) as Response, Restoration, and Recovery Vessels (TRV), dated
(b) Policy Letter **TBD**, Guidance on Disaster Relief Vessels Response Posture and Efforts to Support United States Territorial Islands, dated
(c) Policy Letter **TBD**, Temporary Emergency Berthing Vessels, dated

- 1) **Purpose:** This policy provides guidance for the Marine Safety Center (MSC) and Officers in Charge, Marine Inspection (OCMI) when determining suitability of TRV-endorsed OSVs to be used as temporary transport vessels for response personnel following natural and man-made disasters. This policy is not intended for the transport of displaced citizens.
- 2) **Action:** OCMI and their designated representatives shall bring this policy to the attention of appropriate individuals in the marine industry and CG inspectors, and use these guidelines when a vessel will be used for the transport of response personnel during times of declared disaster.
- 3) **Background:**
 - a) Both natural and manmade disasters often create a need for the transport of response personnel to and from impacted areas in the immediate aftermath of such incidents and over the course of ongoing restoration and recovery efforts.
 - b) The USCG District 8 Policy Letter 01-2017 – Temporary Emergency Berthing Vessels provides for the temporary berthing of response personnel (certified or otherwise qualified to carry out specialized tasks related to response, restoration, and recovery activities). However, it is noted that this policy does not address the transport of response personnel to/from disaster locations.
 - c) These guidelines are provided to serve a twofold purpose. Provide guidance for the use of endorsed TRVs as temporary personnel transport vessels and promote a satisfactory level of safety and comfort for personnel transported on those vessels.
- 4) **Guidelines:**
 - a) This policy shall only be used when disaster response and recovery efforts create a need for the transport of response personnel.
 - b) This policy should be used in conjunction with Policy Letter **TBD** – Endorsement of Offshore Supply Vessels (OSV) as Response, Restoration, and Recovery Vessels (TRV). Vessels endorsed as TRVs may be used for the transport of response personnel within the capabilities of each vessel (as outlined herein) and within the boundaries set by the specific TRV endorsement (e.g. TRV 1, 2, or 3).
 - c) Each vessel owner or representative submitting their vessel for consideration as a temporary personnel transport vessel shall contact the cognizant U.S. Coast Guard Officer in Charge, Marine Inspection (OCMI) and submit to an assessment as outlined within the TRV Policy Letter.
 - d) In addition to those general items outlined within the TRV guidance policy, each proposed temporary transport vessel will be subject to critical safety assessments and requirements specific to personnel transport such as outlined within 46 CFR and/or 46 CFR Subchapter T. Any exceptions to applicable rules and requirements will be provided on an individual basis and explicitly approved or allowed by the cognizant OCMI.
- 5) **Policy:**
 - a) Offshore supply vessels certificated under 46 CFR Subchapter I, T, and/or L may submit requests to the MSC pursuing a COI endorsement as a TRV (Refer to Policy Letter **TBD** – Endorsement of Offshore Supply Vessels (OSV) as Response, Restoration, and Recovery Vessels (TRV)). The MSC will issue a letter listing the OSV's assessed capabilities including for the transport of response personnel during times of declared disasters.

- b) Requirements for passenger vessels as outlined within 46 CFR and/or 46 CFR Subchapter T may be considered as applicable to temporary personnel transport vessels including, to the extent necessary to ensure the safety and comfort of transported personnel.
 - c) Vessels assessed and approved as temporary personnel transport vessels as part of their TRV endorsement and equipped with Portable Accommodation Modules (PAM) must satisfy the applicable rules/requirements including those outlined within CG-ENG Policy Letter No. 01-16 – Portable Accommodation Module Guidance.
 - d) The TRV endorsement and/or status as a temporary personnel transport vessel will impose no unnecessary limitation or restrictions on existing passenger vessels to which 46 CFR and 46 CFR Subchapter T are applied.
- 6) Nothing in this policy limits the OCMI from authorizing any additional support functions (within the scope of the OSV's industrial mission and existing certifications) when the circumstances of a specific emergency dictate the need for additional resources.

APPENDIX G SAMPLE VESSEL, ACTIVITY, AND CAPABILITY MATRICES

		ACTIVITY TYPE / DURATION								
		Response			Restoration			Recovery		
		0-7 Days			1-4 Weeks			1-6 Months		
Vessel Type	Multi-Purpose	Green	Green	Blue	Green	Green	Blue	Green	Green	Blue
	TRV 3	Green	Green	Blue	Green	Green	Blue	Green	Green	Blue
	TRV 2	Green	Green	Blue	Green	Blue	Blue	Green	Blue	Yellow
	TRV 1	Green	Green	Blue	Blue	Blue	Yellow	Blue	Yellow	Yellow
	Vessel of Opportunity	Yellow	Yellow	Red	Yellow	Red	Red	Red	Red	Red
		Inland or Near-Coastal	Domestic	International	Inland or Near-Coastal	Domestic	International	Inland or Near-Coastal	Domestic	International
		Regardless of voyage type, impact of distance-from-shore/distance-of-voyage to be considered in risk assessments.								
		TYPE OF VOYAGE / DISTANCE								
RISK PROFILE		DESCRIPTION								
N/A		Asset has been pre-approved and is considered fit-for-purpose; available for immediate use.								
LOW		Asset capabilities have been assessed and is generally considered fit-for-purpose; available for use following gap analysis against SOLAS or appropriate industry standard for anticipated activity.								
MEDIUM		Asset may NOT have been suitably assessed for required activity; risk and capability assessment(s) recommended.								
HIGH		Asset has NOT been appropriately vetted for the selected activity; full risk and capability assessment(s) required.								

Figure 2: Sample, General Capability Assessment Matrix

TRV 1 - RESPONSE (0-7 Days)																
VESSEL \ ACTIVITY	Multi-Service	TRV			OSRV	Location	Status (Active / Idle)	Available?	Berthing	Comms	Fire-Fighting	Medical / Hospital	Mission Control	Oil Spill Response	Personnel Transport	Search & Rescue
		1	2	3												
Accommodation																
Anchor Handler																
Crew Boat																
Dive Support																
Dredger																
Drill Ship																
Floating Platforms																
Heavy Lift / Crane																
Jack Up																
Lift-Boat																
Offshore Barge																
Oil Spill Response																
Pipe/Cable Lay																
Platform Supply																
Seismic																
Semi-Submersible																
Shuttle Tanker																
Tender																
Well Intervention																

Figure 3: Sample, TRV 1 – Response Vessel Capability Matrix

TRV 2 - RESTORATION (1-4 Weeks)																
ACTIVITY VESSEL	Multi-Service	TRV			OSRV	Location	Status (Active / Idle)	Available?	Cargo (Bulk)	Cargo (Container)	Comms	Berthing	Medical / Hospital	Military	Mission Control	Power Plant
		1	2	3												
Accommodation																
Anchor Handler																
Crew Boat																
Dive Support																
Dredger																
Drill Ship																
Floating Platforms																
Heavy Lift / Crane																
Jack Up																
Lift-Boat																
Offshore Barge																
Oil Spill Response																
Pipe/Cable Lay																
Platform Supply																
Seismic																
Semi-Submersible																
Shuttle Tanker																
Tender																
Well Intervention																

Figure 4: Sample, TRV 2 – Restoration Vessel Capability Matrix (Part 1)

TRV 2 - RESTORATION (1-4 Weeks)																	
VESSEL	ACTIVITY	Multi-Service	TRV			OSRV	Location	Status (Active / Idle)	Available?	Salvage & Navigation	Search & Recovery	Supply (Fuel)	(Re-Supply)	Supply (General)	(Re-Supply)	Supply (Water)	(Re-Supply)
			1	2	3												
Accommodation																	
Anchor Handler																	
Crew Boat																	
Dive Support																	
Dredger																	
Drill Ship																	
Floating Platforms																	
Heavy Lift / Crane																	
Jack Up																	
Lift-Boat																	
Offshore Barge																	
Oil Spill Response																	
Pipe/Cable Lay																	
Platform Supply																	
Seismic																	
Semi-Submersible																	
Shuttle Tanker																	
Tender																	
Well Intervention																	

Figure 5: Sample, TRV 2 – Restoration Vessel Capability Matrix (Part 2)

TRV 3 - RECOVERY (1-6 Months)														
VESSEL \ ACTIVITY	Multi-Service	TRV			OSRV	Location	Status (Active / Idle)	Available?	Cargo (Bulk)	Cargo (Container)	Salvage & Navigation	Supply (Fuel)	Supply (General)	Supply (Water)
		1	2	3										
Accommodation														
Anchor Handler														
Crew Boat														
Dive Support														
Dredger														
Drill Ship														
Floating Platforms														
Heavy Lift / Crane														
Jack Up														
Lift-Boat														
Offshore Barge														
Oil Spill Response														
Pipe/Cable Lay														
Platform Supply														
Seismic														
Semi-Submersible														
Shuttle Tanker														
Tender														
Well Intervention														

Figure 6: Sample, TRV 3 – Recovery Vessel Capability Matrix